

ONTARIO ENERGY BOARD

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| FILE NO.: | EB-2015-0029  EB-2015-0049 | Union Gas Limited  Enbridge Gas Distribution Inc. |
| VOLUME:  DATE: | Technical Conference  July 6, 2015 |  |

**EB-2015-0029**

**EB-2015-0049**

THE ONTARIO ENERGY BOARD

**Union Gas Limited and Enbridge Gas Distribution Inc.**

**Applications for approval of 2015-2020 demand side management plans.**

Hearing held at 2300 Yonge Street,

25th Floor, Toronto, Ontario,

on Monday, July 6, 2015,

commencing at 9:29 a.m.

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TECHNICAL CONFERENCE

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MICHAEL MILLAR Board Counsel

LAWRIE GLUCK Board Staff

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ALEXANDER SMITH Union Gas Limited

DENNIS O'LEARY Enbridge Gas Distribution Inc.

JOHN WOLNIK Association of Power Producers of Ontario (APPrO)

TOM BRETT Building Owners and Managers Association (BOMA)

VINCENT DeROSE\* Canadian Manufacturers & Exporters

JULIE GIRVAN Consumers' Council of Canada (CCC)

ROGER HIGGIN Energy Probe Research Foundation

KENT ELSON Environmental Defence

DWAYNE QUINN Federation of Rental-housing Providers of Ontario (FRPO), Ontario Greenhouse Vegetable Growers (OGVG)

DAVID POCH Green Energy Coalition

KAI MILLYARD

CHRIS NEME

PAUL CHERNICK

GLEN WOOD

MATT GARDNER Low-Income Energy Network (LIEN)

MARION FRASER Ontario Sustainable Energy Association (OSEA)

JAY SHEPHERD School Energy Coalition (SEC)

JAYA CHATTERJEE City of Kitchener

MICHAEL JANIGAN\* Vulnerable Energy Consumers Coalition (VECC)

\* appearing by teleconference

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Monday, July 6, 2015

### --- On commencing at 9:29 a.m.

MR. MILLAR: Okay. Good morning, everyone. I think we will get started.

This is the technical conference for the Union and Enbridge multi-year DSM plan proceedings, EB-2015-0029 and EB-2015-0049.

My name is Michael Millar. I am counsel for Board Staff, and I am joined today by Lawrie Gluck and Valerie Bennett. As I have said, we are members of Board Staff. We are not Board members, so we will act as masters of ceremony and try and keep things moving, but of course we cannot make any rulings or anything of that nature.

As I indicated by e-mail, we have two very full days today, so I am going to ask for everyone's cooperation in trying to make things move quickly and efficiently. I would ask that you preface your questions by directing the panel to the interrogatory response you will be asking your question about, to the extent that is appropriate, and that should allow us both to pull it up on the screen and to allow the witnesses to answer the questions more easily.

We will go through appearances. First I will take appearances from people in the room, and then I will turn to people on the phone, and then we have Enbridge up first today. So I will turn the proceedings over to Mr. O'Leary, but why don't we start with appearances.

# Appearances:

MR. O'LEARY: Thank you, Mr. Millar. Dennis O'Leary for Enbridge Gas Distribution.

MR. SMITH: Alex Smith for Union Gas.

MR. BRETT: Tom Brett for the Building Owners and Managers Association.

MS. FRASER: Marion Fraser for the Ontario Sustainable Energy Association.

MR. ELSON: Kent Elson for Environmental Defence.

MR. POCH: David Poch for Green Energy Coalition. And with me is Kai Millyard.

MS. GIRVAN: Julie Girvan for the Consumers Council of Canada.

MR. QUINN: Dwayne Quinn, here on behalf of FRPO and, tomorrow, OGVG.

MR. GARDNER: Matt Gardner for Low-Income Energy Network.

DR. HIGGIN: Roger Higgin for Energy Probe.

MR. MILLAR: Okay. And who is on the phone?

MR. DeROSE: Hi, Vince DeRose on behalf of CME.

MR. JANIGAN: Michael Janigan on behalf of the Vulnerable Energy Consumers Coalition.

MR. WOLNIK: John Wolnik, APPrO.

MR. NEME: Chris Neme on behalf of GEC.

MR. MILLAR: Is that eve?

MS. CHATTERJEE: Jaya Chatterjee, City of Kitchener.

MR. MILLAR: Okay, thank you, everyone.

Mr. O'Leary, maybe I will turn it over to you. I am not aware that there are any preliminary matters, but perhaps you could introduce your panel.

# ENBRIDGE GAS DISTRIBUTION INC. - PANEL 1

**Ravi Sigurdson**

**Brandon Ott**

**Fiona Oliver-Glasford**

**Michael Lister**

**Jamie Paris**

MR. O'LEARY: I will do the panel introduction as well. There are two preliminary matters, but let me introduce the panel first of all.

Starting looking at the panel on the far left closest to me is Ravi Sigurdson, is the manager, DSM program design, evaluation, and audit. To Ravi's left is Brandon Ott, lead DSM policy. In the middle is Fiona Oliver-Glasford, senior manager, market policy and DSM. To her left is Michael Lister, senior manager, energy solutions, and at the end is Jamie Paris, manager, commercial industrial marketing, low-income delivery. And that is our panel.

# Preliminary Matters:

The two preliminary matters I have, one is the completion of an Interrogatory No. 2 of GEC. We had indicated in our initial response that we would require more time, and we did indicate that we would complete the response by today. We now have the response here.

We have also responded to an Energy Probe request. They asked that we reformat our response to Energy Probe 4 and 14 in a somewhat different format, and we have included that in the second.

So perhaps, Mr. Millar, we could mark these -- well, we probably don't need to mark the interrogatory, because it is already marked, but I suspect we should mark this reformatted document as an exhibit today.

MR. MILLAR: Okay, why don't we do that, so the first document is already marked, as you say, so no need to mark that.

MR. O'LEARY: Just for the record, it is Exhibit I.T13.EGDI.GEC.2.

MR. MILLAR: Okay, thank you. And what will we call the second document?

MR. O'LEARY: A technical conference exhibit. It is a reformatted response to Energy Probe 4 and 14.

MR. MILLAR: Okay. So we will call that KT1.1.

EXHIBIT NO. KT1.1: A REFORMATTED RESPONSE TO ENERGY PROBE 4 AND 14.

MR. MILLAR: Any further preliminary matters, Mr. O'Leary?

MR. O'LEARY: No. I think we're ready to go.

MR. MILLAR: Mr. Smith, nothing from you at this moment?

MR. SMITH: Nothing, thanks.

MR. MILLAR: Okay. We're going to start with Mr. Gardner, who I think just had a few questions and then wanted to get out of here, so over to you, Matt.

MR. GARDNER: Thank you, Mr. Millar.

# Questions by Mr. Gardner:

Matt Gardner for LIEN. Good morning, panel. We have a total of five questions, and three of the five are interrogatory-ish. They're kind of linked, and I have linked them in our letter that we sent out Thursday to our other interrogatories, so those are numbers under the Enbridge heading, pages 2 and 3 of our letter. It is numbers 2, 3, and 4.

So I presume that, to save time, and also because they are technical questions, a written answer back might be the best way to go about that, if that pleases you and makes sense.

MS. OLIVER-GLASFORD: Sure, we can do that.

MR. MILLAR: I don't think the mics are on. You have to have your -- the green light should be on.

MS. OLIVER-GLASFORD: Yes, that would be just fine, thank you.

MR. GARDNER: Okay. Thank you. And so --

MR. MILLAR: Sorry, Mr. Gardner, just to be clear, can you identify the questions, and then I will give them a --

MR. GARDNER: Yes, so on page 2 of our letter, LIEN's letter, it is question 2 under the Enbridge heading, it is questions 2, 3, and 4.

MR. MILLAR: Okay. We will call that JT1.1.

UNDERTAKING NO. JT1.1: ENBRIDGE TO PROVIDE A WRITTEN RESPONSE TO LIEN Technical Conference QUESTIONS 2, 3, AND 4 UNDER THE ENBRIDGE HEADING.

MR. GARDNER: Thank you. So the first question on page 2 under the Enbridge heading is one that doesn't relate specifically to an interrogatory response, it actually relates to a Union Gas interrogatory response. We just want to make sure that we understand Enbridge's evidence on this matter.

So what we've asked here is about the home winter-proofing low-income program. Just to confirm, if -- you say in your -- in the evidence that -- and this is on page -- Exhibit B, tab 2, schedule 1, page 43.

MS. OLIVER-GLASFORD: Tab 2?

MR. GARDNER: Near the bottom of the page of page 43. There is a reference to showerheads and aerators. My question simply is, if you could confirm that we're talking about kitchen and bathroom aerators as being part of the direct install measures for this program.

MR. PARIS: Sorry, yes. So we are -- they're self-install measures.

MR. GARDNER: Okay, understood. And so this is relating to Union's response, because in Union's -- and I realize that you're not Union Gas, and I can ask this question tomorrow, but I just want to understand what Enbridge did to overcome what Union identified as some liability-insurance hurdles in delivering these two types of measures, these kitchen and bathroom aerators, and how you, Enbridge, were able to overcome them and deliver these as specific measures for this program.

MR. PARIS: Sorry, just to clarify, are you asking like as self-direct -- or, sorry, as direct-install or self-install?

MR. GARDNER: Well, I guess that's the -- so maybe you could help me out. Is that the difference between what you -- you understand Union is offering?

MR. PARIS: Yes.

MR. GARDNER: Because it is a direct install on their end?

MR. PARIS: Yes, and that is the difference, yes.

MR. GARDNER: Okay. Understood, thank you.

Okay. Our other question is about what we understand Enbridge is proposing under the multi-res program as another direct-install measure. That is a heat reflector? And I think in discussions with LIEN you've confirmed that the heat reflectors that you are sourcing are from a company called -- or a product called Novitherm; is that right?

MR. PARIS: That's correct.

MR. GARDNER: So we have limited understanding of this product, but our basic research suggests that it is for -- it is for hot-water heating units, radiators, that kind of thing, and not for air duct, HVAC-type applications?

MR. PARIS: Yes. So they're the reflector panels that would go in behind heat register units, correct.

MR. GARDNER: Okay. And so for the folks, the low-income folks out there who don't have that type of system, is there an alternative for convection-based? I don't know if there is a panel out there, reflector panel or product, but I am just wondering.

MR. PARIS: Right now I can't say that I am aware of one.

MR. GARDNER: Okay. I suppose this is an informal or a formal undertaking. Could you look into that and perhaps also let us know -- that is the first part of it -- if there is a product out there for those folks.

I would also like to understand what percentage of the low income multi-residential buildings in your service territory have the air duct system versus the water heating system.

MR. PARIS: Yes.

MR. GARDNER: Thank you.

MR. MILLAR: I guess we can mark that as 1. That will be JT1.2.

UNDERTAKING NO. JT1.2: ENBRIDGE to ADVISE what percentage of low income multi-residential buildings in ENBRIDGE service territory have the air duct system versus the water heating system

MR. MILLAR: I assume the first part is on a best efforts basis I assume, Mr. Gardner?

MR. GARDNER: Correct.

MR. MILLAR: In fact, both of them may be on a best efforts.

MR. GARDNER: I think so. Those are my questions, thank you.

MR. MILLAR: Thank you, Mr. Gardner. Mr. Janigan, are you still there?

MR. JANIGAN: I am.

MR. MILLAR: Okay, you're up.

# Questions by Mr. Janigan:

MR. JANIGAN: Okay. I wonder if I could refer you to Staff's interrogatory 1, that's Exhibit I.T1.EGDI.Staff.1, page 2?.

I am looking at the response in part (c), and it indicates that the LIC residential new construction project submission was unsuccessful in securing funding support from NRCan.

My question is: Why was it unsuccessful, and what is needed to make it successful to secure funding?

MS. OLIVER-GLASFORD: At this point, we don't have details on what would make it successful. We just understand that NRCan did not fund it at this time.

But we can take an undertaking to look into the matter a little bit more, on a best efforts basis.

MR. JANIGAN: That would be fine.

MR. MILLAR: JT1.3.

UNDERTAKING NO. JT1.3: ENBRIDGE TO RESEARCH ON A BEST-EFFORTS BASIS AND ADVISE WHY LIC residential new construction project submission was unsuccessful in securing funding support from NRCan

MR. JANIGAN: Next question relates to Exhibit I.T2.EGDI.Staff.5, page 2 of 2, and it relates to the sentence:

"The company wishes to re-establish targets to levels that have been demonstrated to be achievable rather than carry forward with targets that have demonstrated themselves to be largely unachievable."

Can you indicate the reasons why the targets have been demonstrated to be largely unachievable in the past, and why the need to re-establish the low-income targets?

[Witness panel confers]

MR. LISTER: Hi, Michael. It is Michael Lister. Bonnie, could you scroll up and can we see the question to part (b)?

[Witness panel confers]

MR. LISTER: Mr. Janigan, we're just sorting through our notes here. Thank you for the brief moment.

MR. PARIS: Sorry, could you just restate the question for me one more time, please?

MR. JANIGAN: Sure. In response to the idea that the targets are going to be established to levels that are achievable, I would like to know the reasons why the previous targets have been demonstrated -- have demonstrated themselves to be largely unachievable, and why the need was to re-establish low-income targets, presumably at lower levels.

MR. PARIS: So a large number of the low-income opportunities have been saturated in the market. So that's why we're estimating our -- or forecasting, rather, that the results are going to be less, so to speak.

Sorry, I am trying to think of a better way to phrase that. But ultimately, the idea is that the forecasted results will be less, because the low-income opportunities have been saturated.

MR. JANIGAN: And I assume the low-hanging fruit has sort of already been picked. Is that what it is?

MR. PARIS: Correct, yes.

MR. JANIGAN: Okay. I wonder --

MR. LISTER: Sorry, Mr. Janigan, if we could just add to the response?

MR. JANIGAN: Sure.

MR. OTT: Mr. Janigan, it is Mr. Ott speaking here. Just to add to that, certainly the company is -- I could use the word fortunate, in that it’s had the opportunity to work with Toronto Community Housing over many years.

However, I think it is a known fact that there have been many changes and challenges for that organization over the past couple of years, which has limited our ability to move forward on some of the projects in the part 3 building sector.

So that certainly was a factor in past achievement, and not one we anticipate changing in the immediate future.

Beyond that, I think Mr. Paris has said it very succinctly that we have been working with the social housing providers for some time. So, to use your words, the "low-hanging fruit" is something that we have been burning through.

MR. JANIGAN: Thank you very much. I would like to draw your attention to Exhibit I.T2.EGDI.GEC.19. That is page 2 of 2, and part (c) of the response.

And it sets out here that as noted above:

"Enbridge did not modify program design elements in developing the target sensitivity analyses, which were generated as a specific outcome to a specific request from the Board in its DSM Framework and Filing Guidelines."

My question is: Why did Enbridge not modify the program design elements in developing its target sensitivity analysis? Is that normally -- is that not normally done?

MS. OLIVER-GLASFORD: It's Fiona Oliver-Glasford here, Mr. Janigan. And in response to your question, obviously in doing our planning, this is the first time that we've undertaken such a sensitivity analysis.

So we really took this exercise and used an approach that we thought would be illustrative and helpful in understanding what changes, what kind of budget changes would lead to what subsequent target and savings forecast outcomes.

So in doing so, we had to make some assumptions. And in that process, we determined that we would keep our program design at the current levels of marketing and incentive levels.

So we could have, you know, made changes in that respect. We could have assumed some more aggressive marketing or increased incentives. But we chose to keep them the same, because we thought it would provide the best picture of what we could achieve with different budget scenarios.

MR. LISTER: If I could just add to that response as well?

Essentially what we were looking at was -- we couldn't rightly go ahead and create four different DSM budgets and plans that would be affected by program design.

So as a matter of necessity, we had to make, as Ms. Oliver-Glasford was just pointing out, some simplifying assumptions so that we could communicate to the Board directionally where different budget levels would take us, in terms of targets and achievement.

MR. JANIGAN: Okay. Thank you for that.

I wonder if I could turn your attention to Exhibit I.T2.EGDI.VECC.2, and as well to the interrogatory CME number 2, page 1. And what I would like to do is just to make sure I understand the numbers here in relation to the savings and program costs for the years that are listed there.

And there is a difference, I think, in the program costs of something like 59.92 million, and I believe that that is generated by the impacts of LRAM, SSM, and DSMIDA, and that is the reason for the difference between those two numbers.

MR. OTT: Mr. Janigan, it is Mr. Ott speaking here. Could you please, if you don't mind, point us to exactly which numbers that discrepancy is arising from?

MR. JANIGAN: Okay. In the IR 2, it was asked for annual DSM costs for the years 1995 to 2014, and the costs were 293.45 million, I believe. And in the CME number 2 it was asked for the total cost of DSM, including costs of LRAM, SSM, and BBA, and that was 353.37.

MR. OTT: So a few possibilities come to mind. I hesitate to say anything too certain as to where this discrepancy is sourced from in its exact amount. However, I note that CME interrogatory 2 requests that the company ensure that the SSM and subsequently the DSMIDA are taken into account when discussing these costs, where I do not believe, just reviewing the figures in front of me in VECC 2, that those same costs were built in.

Further, I note that in CME interrogatory 2 the figures provided are from 1995 to the end of 2013, where in VECC 2 2014 is also provided.

MR. JANIGAN: Okay. I think we suspected that was the -- those were the reasons for the differences, but I think we wanted just to confirm.

Could I turn your attention to Exhibit I.T3, EGDI.CCC 5. And it is in relation to the question concerning overhead and overtime -- sorry, overhead and overtime costs.

And the question is: Does Enbridge anticipate overtime costs as a percentage of overhead -- the overhead budget will increase over the 2016 to 2020 period?

MR. LISTER: Sorry, Mr. Janigan, can you clarify your question? Did you say overtime?

MR. JANIGAN: That's right. Do you anticipate that overtime costs as a percentage of the overhead budget will increase over the 2016 to 2020 period?

MS. OLIVER-GLASFORD: No, we do not, given the pool -- the total pool increases. The percentage actually decreases over the course of the -- just slightly, but there is basically flat decreasing overheads.

MR. JANIGAN: Okay. Do you have the forecast for the 2016-2020 period?

[Witness panel confers]

MS. OLIVER-GLASFORD: So we can provide it as an undertaking, if what I'm -- I just want to make sure I am very clear on what you're asking for, though, is the overheads or administrative costs as a portion of the total budget. Is that what you're after?

MR. JANIGAN: It would be overtime as a percentage, I think, of the overhead budget and what the forecast is in actual numbers, I think, for overtime.

MS. OLIVER-GLASFORD: Yes. We can provide that in an undertaking.

MR. MILLAR: JT1.4.

UNDERTAKING NO. JT1.4: ENBRIDGE TO PROVIDE THE FORECAST FOR THE 2016-2020 PERIOD, WITH OVERTIME AS A percentAGE OF THE OVERHEAD BUDGET AND WHAT THE FORECAST IS IN ACTUAL NUMBERS FOR OVERTIME.

MR. JANIGAN: Thanks very much. I wonder if I could turn your attention to Exhibit I.T3.EGDI.CME.3. And my question relates to part (b) of this answer, and requests if you could summarize the offerings that do not count direct and measurable CCM as the target metric.

MR. LISTER: Yes, we could attempt to do that sitting here. It might be a little bit cumbersome. There are 22 programs. If you'd like, we could provide that by way of undertaking.

MR. JANIGAN: That would be fine.

MR. MILLAR: JT1.5.

UNDERTAKING NO. JT1.5: ENBRIDGE TO SUMMARIZE THE OFFERINGS THAT DO NOT COUNT DIRECT AND MEASURABLE CCM AS THE TARGET METRIC, RE EXHIBIT I.T3.EGDI.CME.3 PART (B).

MR. JANIGAN: Thank you. The next question is on Exhibit I.T3.EGDI.CME.11. And in this response the 2015 to 2020 data seems to be missing.

MR. OTT: It is Mr. Ott speaking here, Mr. Janigan. Upon receiving this interrogatory from CME, Enbridge staff went back to analyze the data that was missing. Essentially, the question being asked here is can Enbridge reproduce its existing rate allocation in the same format as provided by Union Gas. Given the time constraints under which the company was operating responding to these IRs, we requested that parties see our existing evidence where it was responsive to that question. Where that evidence was not responsive, however, is that CME was asking to see the same rate-class budgets from 2012 to 2020.

So obviously our 2015 to 2020 plan did not include rate allocations for the 2012 to 2014 period. So for that reason we provided those allocations in response to CME 11.

MR. JANIGAN: Okay. I wonder if I could turn your attention to Exhibit I.T3.EGDI.CME.12 and ask when the Enbridge 2014 final annual report will be expected.

MS. SIGURDSON: Hi, this is Ravi Sigurdson. The audit, the clearance of accounts are expected to be completed over the next couple of months.

The auditor has completed their report, but the next step in the process is for the audit committee to meet and complete the next document, which is the audit summary report. So over the next couple of months.

MR. JANIGAN: So probably by September 1st?

MS. SIGURDSON: Likely, yes.

MR. JANIGAN: Okay, thank you.

MS. OLIVER-GLASFORD: We may not have clearance. So just to be clear, we may have everything wrapped up, but it would be predicated on clearance through the Board. So that may not occur until closer to the end of the year.

MS. SIGURDSON: Right. So if we go off last year, for example, we had the auditor's report complete, then the audit summary report, then we file for clearance of accounts, and then it goes to the Board.

Then, if there are IRs, then those would need to get responded to. And so it could move all the way over to January/February, so from past -- the last couple of years of experience has shown us that.

MR. JANIGAN: Okay, thank you for that. In Exhibit I.T3.EGDI.Energy Probe.2, it has a series -- provides a series of metrics associated with DSM, and the DSM sector.

And going through those metrics, it appears that the low-income multi-residential actuals have been less than the budget in 2012 and 2013.

Is there any reason for the difference in the actuals and the budget?

MR. PARIS: Sorry, Mr. Janigan. It is Jamie Paris here. So are you asking why there is a difference between the actual spend -- sorry actual results and what was planned?

MR. JANIGAN: Yes, that's right. The actual spend on low-income multi-residential for 2012 and 2013.

[Witness panel confers]

MR. PARIS: So, Mr. Janigan, this is similar to my previous response regarding the saturation of the low-income results, and we know working closely with specifically Toronto Community Housing and trying to access some of the potential projects there.

So it is just, you know, an overall reduction in the ability to access projects overall for multi-res.

MR. JANIGAN: Sorry. Did somebody interject something there? No?

And this is applicable both for low-income multi-unit housing and single-unit housing?

MR. PARIS: Sorry, are you saying the question is applicable to both?

MR. JANIGAN: Yes.

MR. PARIS: Yes. The answer is the same for both. I mean, you know, just as a saturation overall of the available projects for low-income has led to a gradual reduction in the overall results.

MS. OLIVER-GLASFORD: And, Mr. Janigan, this is Fiona Oliver-Glasford. Just as an extra kind of comment here, when you are looking at budgeted versus actual spend -- so, for example, when I look at the 2014 budgeted versus actual, they're almost -- you know, they're very, very close.

So within kind of a range of budgeting accuracy, they're quite close, and the same with 2013 year for part (9).

MR. JANIGAN: Okay. I wonder if I could turn your attention to Exhibit I.3.EGDI.VECC 9?

And I wonder if it is possible to get the 2015 numbers, if they're available. That was in part (a); we asked for a similar table for the years 2012 to 2015.

MS. OLIVER-GLASFORD: Okay. So the reason that we had not put it in, as you know, is we're still in the process of our audit. But we can undertake to provide best efforts and best available at this point.

MR. JANIGAN: Okay. That would be fine.

MR. MILLAR: JT1.6.

UNDERTAKING NO. JT1.6: ENBRIDGE TO make best efforts to PROvide best available information in response to Exhibit I.3.EGDI.VECC 9 (a) and (B); ENBRIDGE to make best efforts to provide the numbers for the ccm program budget

MR. JANIGAN: And I wonder if that is possible -- we didn't ask it with respect to VECC Interrogatory No. 4, the 2015 results. Is it possible that, to generate the same for that interrogatory?

MR. PARIS: Sorry, Mr. Janigan, we're just pulling up the IR.

MS. OLIVER-GLASFORD: That’s the CCM generating program budget?

MR. JANIGAN: That's correct.

[Witness panel confers]

MR. JANIGAN: That would be fine.

MS. OLIVER-GLASFORD: Okay. We were just confirming with one another that that would be just fine. We will make best efforts to do that. I am noting that those numbers are not final, nor are they cleared. So they're subject to change.

MR. JANIGAN: Okay.

MR. MILLAR: So we will make that part of JT1.6.

MR. JANIGAN: Thanks very much. I wonder if you could turn up Exhibit I.T5.EGDI.LIEN.3?

MR. MILLAR: Mr. Janigan, just for your information, we're having some technical difficulties with the on-screen display. But I believe the witnesses do have at least some paper copies, so we may need a moment to pull some of those up.

MR. JANIGAN: Okay.

MR. MILLAR: So just wait until they tell you they’ve got it.

MS. OLIVER-GLASFORD: Can you just confirm that was LIEN 5 in tab 5?

MR. JANIGAN: LIEN 3. LIEN 3.

MS. OLIVER-GLASFORD: LIEN 3, here we go.

MR. LISTER: Okay, we have that.

MR. JANIGAN: The question arises in the second part of the response that Enbridge will be seeking feedback from its low-income stakeholders to assist in designing a program offering an implementation approach that will achieve optional energy savings and energy benefits to the target market, while maintaining the cost-effectiveness parameters of the overall low-income program.

The question is: When will this feedback be sought?

[Witness panel confers]

MS. OLIVER-GLASFORD: So the feedback from the low-income stakeholders is captured during two stakeholder sessions per year, where both Union and Enbridge meet with the low-income stakeholder group to discuss program design.

And so I would believe that would be the opportunity that we would use to seek feedback, unless the timing didn't work out and an ad hoc session needed to be struck.

MS. SIGURDSON: Just to add to that, so -- this is Ravi Sigurdson. For example, last year we had two low-income sessions. But also, to Fiona’s point, we have the ad hoc sessions as well.

So depending on the timing, the offer, those working groups and whatnot would be scheduled, and we would also have calls to interested parties on an as-needed basis as well.

MR. JANIGAN: Okay. I wonder if I could turn your attention to Exhibit I.T6.EGDI.Staff Interrogatory No. 25?

MR. LISTER: Yes, we have that.

MR. JANIGAN: And the question arises from part (iii), response (a), indicating that the actual savings experienced by the participant relative to the modelled savings is not within the scope of this offer.

The question is, why not? And where is this typically done?

MS. SIGURDSON: This is Ravi Sigurdson. So this program is one that the targets are actually based on model savings. So you'd -- in order to be able to measure apples to apples, then you've got the model savings versus models.

The actual, we don't track the costs. So with this statement saying measuring actual savings experienced by the participant relative to model savings is not within the scope of the offer.

So if we were to go -- maybe an example would be helpful. So if we model the savings on year 1 and then year 2 we go and model -- or provide actual savings, circumstances may have changed in the home. The occupancy might have changed. And that would require further EMB to compare.

In essence, what we would say is if we wanted to go back and measure actual, we would have to say, okay, so let's take away any equipment that we have put in, any improvements that we've put in, and then you have got the same household with the same environment, meaning three occupants and three occupants, so you're comparing like-to-like, and that is the challenge with what is being asked here.

MR. JANIGAN: Okay. I wonder if I could turn your attention to Exhibit I.T6.EGDI.GEC.26. And this response -- has that showed up on the screen?

MR. MILLAR: No, we don't have the system back up, but...

MS. OLIVER-GLASFORD: We have got it in front of us.

MR. MILLAR: They do have a paper copy in front of them.

MR. JANIGAN: Okay. It shows that the evaluation spending for low-income programs has greatly increased. Why has it -- what's the reason for those increases? And why -- what's the reason for the increase in 2017?

MS. SIGURDSON: So in looking at this, so some of the pieces that we've put into the evaluation for low-income is specific information for the weatherization program for the privately-owned multi-family pieces.

So those are areas that we haven't looked at in 2013, but we anticipate, just in terms of the Board priorities and the areas of focus moving forward. So we have built in those budgets for 2016 and beyond.

MR. JANIGAN: Okay.

MS. OLIVER-GLASFORD: Just to add to that, although when we look at the low-income program budgets, they do increase over time. So accordingly, with more focus, we thought more evaluation would be appropriate.

MR. JANIGAN: Okay. I wonder if I could ask you to turn up Exhibit I.T11.EGDI.Staff.30.

MS. OLIVER-GLASFORD: Yes, we're ready.

MR. JANIGAN: And dealing with page 2, part (d), where it's indicated that the following are some examples of early collaborative progress with initiatives likely to launch in quarter 3 of 2015.

Down below that, and in part (iii) deals with low-income collaboration and indicates that a program launch is planned for the summer of 2015.

Can you describe the program that is going to be launched?

MS. OLIVER-GLASFORD: Just one moment.

[Witness panel confers]

MS. OLIVER-GLASFORD: Sorry, we're just trying to sort through our binders here. Just one moment, thank you.

MR. JANIGAN: No problem.

[Witness panel confers]

MS. OLIVER-GLASFORD: Okay. Can you hear me okay?

MR. JANIGAN: I can.

MS. OLIVER-GLASFORD: Okay, great. So we had provided that on an anonymous basis, LDC-C, but since that time, and just subject to check with the sector-lead, but this low-income collaboration really refers to the collaborative integration work that we've been doing with Toronto Hydro in respect of determining how we jointly go to the customer and reach them, versus two touch points, being one touch point.

So I am pleased to report that this is moving along nicely, and that essentially the -- it's a bit complicated, but Toronto Hydro, in working with us through this, there's been significant legal costs in coming up with a standard agreement and some various bits and pieces around procurement.

So they've been seeking cost recovery from the ISO to cover those costs, and that's what we refer to when we say decisions are pending. They're still going through the process of making sure they can get recovery to do that. But indications look positive, and so we expect that this will be moving along in the short-term.

So essentially it would just be using the same contractor, perhaps, for low-income as well as in residential programming.

MR. JANIGAN: So these are legal agreements between Enbridge and the contractor, or with the participants or -- or both? I take it it deals with how most effectively to encourage participation through various ways of contacting the customer?

MS. OLIVER-GLASFORD: I will have to check, but I do believe that there are contracts between Enbridge and Toronto Hydro.

MR. JANIGAN: Okay. And then they will allow Enbridge to contact the customer in a --

MS. OLIVER-GLASFORD: Correct. Because we're dealing with a lot of privacy and sensitivity issues as well around data. So we've had to be very mindful of that, and as we ventured into collaboration discussions that has become first and foremost on our mind, is to make sure that we're respecting, you know, PIPEDA and GDAR rules and, as such, we have recognized that there are perhaps some barriers around confidentiality, and we're trying to work through them.

MR. JANIGAN: Okay. Thank you very much. Those are -

MR. DeROSE: Michael? Sorry, it is Vince DeRose. Would you mind if I just asked one follow-up question on that last IR --

MR. JANIGAN: Sure, go ahead.

MR. DeROSE: I hope the folks from Enbridge don't mind me jumping in.

The legal costs -- you mentioned that Toronto Hydro is seeking recovery of its legal costs from the IESO. Is Enbridge incurring legal costs, and if so, are you seeking recovery of your legal costs?

MS. OLIVER-GLASFORD: It's a good question, Vince. I think, you know, as we kind of explore this collaboration discussion more and more over the coming month and a half, it will become more and more clear that the electric administrative processes and their framework just is set up differently.

So what they're allowed to cover, based on their ECA, or their environmental -- or their environmental -- or, sorry, energy conservation agreement is very specific, and this was seen as outside of that for them, and the IESO as such has set up separate pools of funding to cover such administrative and additional costs.

So it's a bit different. Like, they've got a budget, but then they've got additional budgets that they can access through IESO for different items.

We function differently, in that we've got our budget and we are determining that budget on the needs of running our business. So we're not going to be seeking cost recovery to the ISO for those costs.

But it does raise a good point because collaboration, especially at the front end, is going to be costly in terms of time and resources. So that is certainly a consideration as we move forward.

MR. DeROSE: And so, at least from the gas side or from your perspective, from the Enbridge perspective, you see those type of costs as being already included in the budget, and not something that would be incrementally recovered on a going forward basis.

I'm not sure where you would recover it, but it's part of the DSM budget; it's not something outside of the DSM budget?

MS. OLIVER-GLASFORD: Correct. And when we established the collaboration and innovation fund, that fund was really -- and hence, why we talk about the need for flexibility in that fund. That fund was really established to enable collaboration.

And so if we found that there were incremental costs related to doing collaborative work --whether it be in our main portfolio, in a pilot -- that, you know, would be an appropriate place to have those funds recovered, essentially within that pool of funds, because that is what they're for is enabling collaboration and integration.

But it would not be on top of the budget that we’ve put forward today.

MR. DeROSE: Thank you.

MR. JANIGAN: Thank you very much. Those are all of my questions, and thank you very much for accommodating my timetable today.

MR. MILLAR: Thank you, Mr. Janigan. Mr. Poch, are you ready to proceed?

MR. POCH: Yes, thanks.

# Questions by Mr. Poch:

MR. POCH: I have Mr. Neme on the phone, who will be -- as an expert who will be providing our report in evidence in this case.

I am just going to invite Chris to jump in whenever I fumble a question, or it needs follow-up or clarification, if that’s all right.

MR. POCH: And I would like to start with -- I think probably the easiest way is give you the PDF number. Does that work?

MR. MILLAR: I don't think so, because our system is not running.

MR. POCH: All right, okay. GEC 1, which is, for those who have the PDF on the screen, page 811, topic 13.

In part (e), we asked for the median annual consumption of customers in the rate classes. You gave us the average, and some of the rate classes were left out.

MR. O'LEARY: Can you repeat the reference again? We're trying to do this manually down here as well.

MR. POCH: It is topic 13, GEC 1, PDF pages 811. In response to sub question 1 (e), I am just wondering -- you gave us average, not the median we asked for. And we also wanted it for all of the rate classes, and none were provided for rate classes 200, 125 or 300, only aggregates.

Can that be provided today, or by undertaking?

MR. OTT: So the company is comfortable taking that on as an undertaking, if that is acceptable to GEC.

MR. POCH: Sure.

MR. OTT: I will caveat at this time. Certainly filing GEC 2 this morning in its completion, slicing and dicing rate level data in that fashion has proven to be more challenging than expected.

So it will be on a best efforts basis, and hopefully that is acceptable to GEC.

MR. POCH: That is all we can ask.

MR. MILLAR: JT1.7.

UNDERTAKING NO. JT1.7: enbridge to provide on a best-efforts basis a response to topic 13, GEC 1, PDF pages 811, question 1(e)

MR. POCH: Okay. In the same interrogatory -- just to clarify, this is part (g) I wanted to know -- to understand whether this includes commodity costs or not, and whether it includes fixed charges or not.

MR. OTT: If it's satisfactory to GEC, we would also like to take this away to respond in writing.

MR. POCH: All right. If you would in responding, would you provide answers, to the extent possible, by rate class as well?

MR. OTT: Yes.

MR. POCH: Thank you.

MR. MILLAR: JT1.8.

UNDERTAKING NO. JT1.8: enbridge to provide on a best-efforts basis a response to topic 13, GEC 1, PDF pages 811, question 1(g)

MR. POCH: Topic 1, GEC number 3, page 456 of the PDF.

MS. OLIVER-GLASFORD: Sorry, would you repeat that? It's a different binder.

MR. POCH: It’s Exhibit B, tab 1, schedule 2 -- I'm sorry, that is the question. Never mind.

This is, is that topic 1? I'm sorry.

MR. NEME: It's GEC 3, right?

MR. POCH: It is GEC 3, topic 5. I don't know how you have your materials arranged.

MR. LISTER: The topic is the critical part.

MR. POCH: Topic 5, GEC 3. I wanted to understand the significance in your answer to part (f) of savings after 2020. Is that just an indication of your presumption that it's going to continue for beyond the five years?

MR. PARIS: Sorry, you're correct, yes.

MR. POCH: All right. Can you give us some indication of where the -- how you came up with this trajectory of three percent year one, and two percent in year two, and more in year three, et cetera?

MR. PARIS: Yes. So as it relates to the program, there was the sense that a lot of the "low-hanging fruit", so to speak, will be gathered in the first year of the program. And that's why there's showing a decline in the forecasted results as we move on to 2020.

MR. POCH: Topic 12 -- sorry to jump around. This is the sequence I have them in, and this was GEC number 4, page 752 of the PDF.

Here in part (iv), we asked for copies of all of the documents that illustrate exactly what Enbridge had done, what the process was, and the results of the process so far -- and this is in terms of moving forward on an IRP approach.

Given the limited response, we're wondering if the IRP study -- if the IRP study scope is the only written work product to date. Are there no other studies, are there any jurisdictional scans or directional memos, et cetera?

MS. OLIVER-GLASFORD: So I believe we also filed the agendas for the demand supply working group committee meetings.

In looking back, I looked back to ensure we've got everything. I did pull two additional documents, which I can put on the record. One is for -- there's some informal notes that we had in a call with Fortis BC to discuss, you know, their work to date on IRP, just to understand, you know, do they have people afforded to it, how are they tackling that. So they're very informal in bullets, but I can certainly put those on the record.

And there’s a presentation that we were going to present to the demand supply working group in January for a meeting we had scheduled, which actually did not take place. So I am happy to put that presentation on to the record as well.

MR. POCH: Sure. Let's get an undertaking for that, first of all.

MR. MILLAR: KT1.2.

UNDERTAKING NO. JT1.37: ENBRIDGE TO SUPPLY DOCUMENTs PREPARED FOR THE DEMAND SUPPLY WORKING GROUP

MR. POCH: You mentioned you have been in touch with Fortis. Can you tell us, have you been in touch with other utilities to try to find out the different approaches and if so --

MS. OLIVER-GLASFORD: There was an informal call, which I was not a part of, with ConEd. That call does not have any notes that I am aware of, and the individual who took part in that call is no longer with the organization; she has since retired.

So I couldn't find anything on that, but I understand it was just an informal discussion. So we still have yet to do a proper jurisdictional review.

MR. POCH: Okay. Topic 2, GEC number 7, which is at PDF page 111. Part (a).

MR. LISTER: Mr. Poch, did you say GEC number 7?

MR. POCH: Yes. Part (a), we asked how many participants in each month in the residential program. There was zeros for January 2015. We're just wondering if that is an omission or, if not, why?

MR. LISTER: Yeah. The reason there are no submissions there for January is for a couple of reasons, actually. All the participants -- so essentially it has to do with calendar. So all of the participants who are in the program get completed by the end of the year and shuffled through by December 31st. Then a year starts anew, and of course on January 1st nobody has yet completed the program for the year and it takes some time to go through the audit, the retrofit, and the post-audit. So naturally there are no customers to report in that month.

MR. POCH: All right. Number 11. Topic 3, GEC 11. Page 287 of the PDF.

MS. OLIVER-GLASFORD: GEC 11?

MR. POCH: GEC 11, yeah. The question pertains to your answer to part (3) --

MR. LISTER: If we could just have a moment.

MR. POCH: Sorry. Do you have that yet?

MR. PARIS: We don't have it pulled up yet.

MR. DeROSE: You're looking at page 6 of 6, right, David?

MR. POCH: I am not even looking at it, but, yes. Are you there?

MR. PARIS: Yes thank you.

MR. POCH: It is part 3 -- (a), part 3. And we were asking for breakouts of the budgets, the components of budgets for the 22 programs. And we just have an aggregate value for evaluation. We're wondering if there is no program-specific value or other program-specific costs like admin and training and so on, which would be part 4.

MS. SIGURDSON: So there was a further breakdown for the evaluation costs. You're correct, this is the aggregate. However, I believe in GEC -- I want to take us to 26 -- there is a breakdown of what comprises that $1.5 million, for example, in 2016. So if you want to pull up GEC 26. Topic 6.

MS. OLIVER-GLASFORD: Sorry, just to clarify. Are you asking for detail within evaluation? Or are you looking to understand where the detail such as program-specific training, et cetera, fall within our budgets?

MR. POCH: I will pass that one to Chris.

MR. NEME: Yes. Fiona, it is a little bit of -- actually, I don't think those are separate from each other. I think we are trying to understand whether you are treating all evaluation and other admin costs as just at the portfolio level, in part for cost-effectiveness screening, understanding, but also in part to understand how much of what you're doing is generic, as opposed to how much of it is program-specific.

MS. OLIVER-GLASFORD: Okay. I will kind of just give one thought, and if Jamie or Mike want to add anything else. But just in terms of, you know, program-specific training, that sort of item, that would be captured under the marketing costs of the program budget. So I just want to make sure that that's clear.

MR. NEME: That's good, that's the second part of the question, great.

MS. OLIVER-GLASFORD: I will let Ravi continue with where she was taking you.

MS. SIGURDSON: Was there a further question on that, Chris?

MR. NEME: No. So I think the remaining question then is, it sounds like those program-specific training and so on is captured in the program marketing budgets, so now the question is, with respect to evaluation, is all of the evaluation treated at the portfolio level? Or do you have some of the evaluation costs treated at portfolio and some of them treated as individual -- individual program evaluation costs?

MS. SIGURDSON: So that's where -- so in terms of GEC 26, in topic 6, if you want to pull that up for a moment. That gives you the breakdown. So we put it -- so it is broken down by resource acquisition, so it is at the program level, and then the further split is with audit, research, and evaluation advisory forum.

MR. NEME: Right. And in question 26, for example, under "resource acquisition", it looks like you have it allocated by sector, residential, commercial, and industrial.

MS. SIGURDSON: Yes.

MR. NEME: Is that the level -- the final level at which you do it? Or do you have it also allocated within individual programs within those sectors?

MS. SIGURDSON: So it is within those individual sectors.

MR. NEME: So this is the most disaggregated you get on evaluation costs is the point --

MS. SIGURDSON: Right. So in considering this budget, you know, we put forward to say, okay, what types of programs are going to be moving forward for residential, commercial, and industrial and anticipate what types of evaluations would need to be conducted. And so that is where, you know, for example, with residential, build in a piece for OPower moving forward. So that is how we built those budgets up.

So right now, yes, we present it for residential, commercial, industrial. But it is comprised of different program areas or offers within each of those sectors.

MR. NEME: The 120,000 that you're showing in 2016 for residential, some of that is for the OPower behavior program, some of that is for the advanced Wi-Fi thermostat, some of that is for the home retrofit program --

MS. SIGURDSON: It is not broken down to that detail. However, so, you know, as we move forward through this process we do need that flexibility and evaluation with each of those sectors.

So moving forward, this is a six-year plan. So we may need to move our priorities to a different offer, depending on how that moves forward.

MR. NEME: So at this point you have only assigned it to the sector, and you will figure out which programs within each sector will get it from year to year based on priorities at the time?

MS. SIGURDSON: Yes, correct.

MR. NEME: Okay.

MR. POCH: Okay. If we could turn to topic 3, GEC question 12. Page 293 of the PDF. Here we were asking for, in the resource acquisition, the historic breakouts. And you've got N/As for large and small CI customers, but you have given numbers for total.

We seem to recall having been able -- you have been able to give us at least estimates of the breakout between those in the past cases. Is it possible to provide any further disaggregation?

MS. OLIVER-GLASFORD: So unfortunately, none of us on the panel were actually there for past negotiations, so I apologize for that. So I would have to look back to see what was provided and what assumptions were used in doing so, whether it was, you know, they actually went to the work of figuring out every single project and going back in our systems to do that breakdown or whether they made some assumption.

So I don't know how they did it in the past. The reason why -- and it is kind of implicit in what I just said -- why we hadn't done it to date is because for any level of accuracy on that we would have to go back into our systems, understand every project, what rate class they're associated with, what their through-put is, and then try and break them out accordingly, and so that's really -- it was seen as very onerous and time-consuming.

We can look to undertake that. I can't commit to what the timing would be. If you would find it very useful --

MR. POCH: Chris, I'm going to pass that to you. I don't know what level of detail we need there.

MR. NEME: I guess I would say, Fiona, if you could look back at how you did this before, because my recollection is that in the past, you have given us estimates by, you know, large, medium and small, for example, on C and I.

And if you want, I can dig up what you have given us in the past and forward it on to you, if that is a good starting point.

If it proves that it is not possible to replicate those numbers without, you know, two weeks' worth of work -- which would obviously arrive too late for us to make use of it -- then let it go.

But if you find that there is, you know, best efforts, that there is a way to come up with a reasonable enough proxy without exorbitant amounts of work, that would be helpful.

MS. OLIVER-GLASFORD: I'm guessing they probably did use some sort of proxy in the past. So we can look back at that, and make best efforts to provide it to you on that basis.

MR. POCH: Let's do it on that basis, as an undertaking with best efforts, and we will provide whatever leads we can from our end.

MR. MILLAR: That’s undertaking JT1.9. There was a lengthy description there. Could the witnesses describe what they are undertaking to do?

UNDERTAKING NO. JT1.9: with reference to topic 3, GEC question 12, Page 293 of the PDF, ENBRIDGE TO PROVIDE on a best efforts basis, in the resource acquisition, the historic breakouts

MS. OLIVER-GLASFORD: So we would be proposing to fill-in the N/As currently on the table in Exhibit I.T3.EGDI.GEC.12, on best efforts basis.

MR. MILLAR: Thank you.

MS. OLIVER-GLASFORD: If I could put a small plug in for our IT system? I think if we had a different IT system before this might help us do things like this that we're not able to do easily at this point.

MR. POCH: You're in a room full of consumer advocates who are sceptical of IT expenditures, from past experience, I think.

If we could turn to topic 2, GEC 15, part (iv), I think, and your response -- I will wait until you have it up, I'm sorry.

MR. NEME: It's subsection (a), part (iv).

MR. POCH: Yes.

MS. OLIVER-GLASFORD: Yes. I think we're almost there, yes.

MR. POCH: Okay. You sent us off to look at tab 2, EP 19, and I think that might have been a misdirection because it is with respect to a resource allocation, not low-income, and our question was about low-income.

MR. LISTER: Sorry, Mr. Poch. Is your question specifically -- what is your question specifically?

MR. POCH: The question we were asking is about the -- if I understand correctly, it was about the single family savings metrics, low-income. And we asked about the decline in savings, despite budget increases in 2017 through 2020.

And your response said to see EP 19. But our interpretation of EP 19 is it’s addressing resource acquisitions, not addressing this topic.

MR. LISTER: I am certain there is -- my recollection is there is somewhere in the body of interrogatories where we have addressed that. So perhaps it is just a misdirection.

MR. POCH: I think it is. Why don't we just get an undertaking? If you don't mind just trying to point us to the correct target you were intending there, that would be helpful.

MR. MILLAR: JT1.10.

UNDERTAKING NO. JT1.10: enbridge to clarify the answer to gec 15, part (a), sub (iv)

MR. POCH: That is just to clarify the answer to GEC 15, part (a), sub (iv).

MR. LISTER: Yes.

MR. POCH: And in part (c) of that interrogatory, again, sub part (iv), we were asking for the size of the market. And you indicate it is difficult to estimate, but you obviously must have some sense of it, you're setting a target.

So I'm wondering if you can give us whatever your best estimate is, or a range, and if there is any historical information that you have that would give -- help benchmark that.

MR. PARIS: Sorry, Mr. Poch. Just to clarify, this is for the low-income new construction offer?

MR. POCH: This is --

MR. NEME: Correct.

MR. POCH: Correct, yes.

MR. PARIS: Right. So without quickly -- I haven't -- without reviewing this quickly, I know we had a number of conversations with stakeholders regarding the number of potential opportunities within the next ten years for this program.

I don't have the specific numbers right on me, so I suppose we would have to undertake to get back to you to give you the results of those various conversations, keeping in mind that some of them were very specific and some of them weren't in our discussions with the stakeholders.

MR. POCH: Right. Well any information that helped you come up with your target in that regard would be helpful to us, to either be able to accept it or challenge it, obviously. That is the nature of what we're doing here.

MR. PARIS: Sure.

MR. MILLAR: JT1.11.

UNDERTAKING NO. JT1.11: enbridge TO MAKE BEST EFFORTS to provide further information on the market size as stated in the answer to gec 15, part (C), sub (iv) and (v)

MR. POCH: And that is GEC 15, part (c) sub (iv), to provide further information on the derivation -- on the market size.

MR. LISTER: Understood. If I could, a small caveat to that. I'm sure that part of our reluctance is that it is a brand new program in a market that hasn't been served in this way.

So I think your earlier invitation was to allow it -- allow us to provide a best estimate. And the caveat is that it will be only an estimate, and the level of granularity is probably not great.

MR. POCH: That's fine. You will put whatever caveats you need to in the answer. That's fine; we understand that.

And on the same interrogatory -- I think you may have just captured this, Chris, I will turn to you. I think you just captured this in the same undertaking, where you referred to a bunch of conversations there.

I am wondering if there is any more detailed information that would help quantify anything there.

MR. NEME: You can roll these two together. The bottom line of what we're after is that you've set a target. You obviously didn't have a dart board and just threw it at the wall to find out where it would land. While the information is not -- it's far from perfect, you must have had some information in order to set the target.

All we're asking is, with all of the appropriate caveats, what is that information. Whether you got it from people you talked to, or whether you have historical data on new construction projects in the municipalities you're working with, or whatever other sources might be relevant.

MR. POCH: I think the previous -- the undertaking we just received can cover that. We should just note the undertaking should refer to both parts of (iv) and (v) of our question.

MR. MILLAR: The company agrees to make a best efforts attempt to do that?

MR. PARIS: Yes.

MR. MILLAR: Okay, so that will be part of JT1.11.

MR. POCH: Thank you. Topic 2 again, GEC 16, and this was part (b) about the Home Health Report. You referred us to BOMA 44 for the various sub questions we asked, and our review of BOMA 44 suggests it only addresses one of our questions, the forecast of households.

Can we get, I think, probably -- I don't know if this needs to be an undertaking, but can we get answers to the other sub questions there, 2 through 6?

MR. LISTER: I'm sorry, Mr. Poch, are you -- so you're looking at GEC number 16, tab 2.

MR. POCH: Yes.

MR. LISTER: And one of the sub parts --

MR. NEME: B.

MR. LISTER: You're suggesting -- again, perhaps a misdirection?

MR. POCH: I don't think it is a misdirection. I think you directed us correctly for the answer to part (b), sub (i).

MR. LISTER: BOMA 44 is at T5.

MR. POCH: Yes. It just -- I think then you just forgot to go back and answer the other ones.

MR. LISTER: I see. There are extra sub-parts that maybe we missed or something?

MR. POCH: Possibly.

MR. LISTER: This is BOMA 44?

MS. OLIVER-GLASFORD: And Mr. Poch, what were you looking for answers on specifically that were not covered?

MR. NEME: 16(b), (ii) through (vi).

MR. POCH: Yes.

MR. NEME: You answered 16(b)(i) in BOMA 44, but you didn't answer 16(b)(ii), (iii), (iv), (v), or (vi).

MR. LISTER: It might be helpful to look at Energy Probe 22, I think, which was another one that relates to -- which I believe is in tab 5.

You might -- I have not read -- reread sub-parts (i) through (vii) of part (b), GEC 16, but in EP 22 there is a fairly lengthy answer that relates to -- in my own health record program as well -- which addresses, I think, many of the questions that are in your sub-parts (i) through (vii).

MR. POCH: I am wondering how best to proceed. It's going to take us a little while to digest that and see to what extent it answers our questions.

MR. NEME: It addresses -- yes, it will take a little bit of time to go through it. I don't know what is the right process. Can you, David --

MR. MILLAR: Why don't you move on, and we will have a break in a little bit --

MR. POCH: We will put an asterisk next to that and maybe have to come back to it. How is that? I'm going to ask Chris to look at that during the break.

MR. NEME: Yes.

MR. POCH: Part (e) of our same question, question 16, sub-question (i) under part (e), this is about the commercial savings budget i-metric. We asked about the size of the eligible market. We're just trying to get some clarification.

You give us a number of new commercial projects. We're wondering if that -- it appears to us that number encompasses projects that wouldn't meet the program criteria of 50,000 square feet or more.

Can you tell us what --

MR. LISTER: Yes, I do recall this response. So I guess a couple of things. Firstly, you will notice that the headings there in the chart, or the -- one of the headings is "average square feet". So by sector that's reported here, of course, there might be some projects that are higher and some that are lower. It is an average that we're showing here.

So the numbers may not precisely add up to what the potential eligible market is. In any event, did that sort of answer your question?

MR. POCH: No. I guess we're concerned that the program only applies to buildings of 50,000 square feet or more; is that right?

MR. LISTER: Well, subject to the condition that there are averages here. So there may be -- there may in fact be, for example, buildings in industrial light whose average is only 31,699. There might in fact be buildings there that do apply, because 31,699 is only an average.

MR. NEME: Right. I guess, Michael, what we're asking is, we wanted to know what the size of the eligible market is, and what you have given us is the size of the total market, and it's only a portion of which is eligible, even within each of these subsections.

So there could be another column to this table that, rather than showing the total number of projects, what -- so if you've got 31 industrial light projects, how many of those were above 50,000 square feet? And the same for the other categories.

MR. LISTER: The truth is, Chris, I don't know what data is available. This was -- the asterisk there is -- it's taken from the Reid's report.

What we can do is look at that, and if there is more discrete data that allows us to do that, we will provide it.

MR. POCH: If we can get an undertaking to go back and look at your source documents to see if the answer in part (e) there in the table can be disaggregated by the number of projects and average square feet, perhaps, for those projects that meet the criteria of 50,000 square feet or more.

MR. MILLAR: JT1.12.

UNDERTAKING NO. JT1.12: TO LOOK AT SOURCE DOCUMENTS TO SEE IF THE ANSWER IN PART (E) IN THE TABLE CAN BE DISAGGREGATED BY THE NUMBER OF PROJECTS AND AVERAGE SQUARE FEET, PERHAPS, FOR THOSE PROJECTS THAT MEET THE CRITERIA OF 50,000 SQUARE FEET OR MORE.

MR. POCH: Turning to topic 7. Question 18. GEC 18. Page 564 of the PDF. In part (a) of your answer, you say in the last part of that:

"To the degree that custom savings calculations also incorporate pre-set, standard, or replicable input assumptions across multiple projects of a similar nature, those assumptions would be subject to the TAF."

Target adjustment factor. We're trying to have greater specificity about what that means.

Can you tell us what you mean by, you know, specifically about by preset, standard, or replicable assumptions, what that might be?

MR. OTT: Sure. Two points in response to that request. I think the best way to address that question is really by way of example. We have a significant portion of our CCM, cumulative cubic metre, results being driven by customer projects in the industrial and commercial sectors.

In the commercial sector, we are in the early stages working with TEC of a boiler-based case study which, plus or minus, could have significant impacts on the results that are achieved through boilers, many, if not most, of which are calculated on a custom basis.

But they do have some guidelines. We have in the past filed custom measure life guidelines, and to the degree that we saw one of those guidances change significantly, the company finds that it would be just as appropriate to apply the TAF to that situation as it would a prescriptive situation.

Having said all of that, though, the company's intent with the target adjustment factor, or TAF, as I have already been referring to it, the company's intent is to be as transparent as is possible with this adjustment factor.

We know that it is a concept that hasn't been used in the recent past for our DSM portfolio. So with that in mind, in our view, calculation of the TAF and which inputs were or not subject to it and the way in which it is applied in a given year would be reviewed by the auditor and audit committee to ensure their reasonableness and consistency with whatever it is the Board ultimately decides in this proceeding.

So perhaps that's not a line item of every last input that would be included in a custom calculation, but our hope is that it offers some comfort that we really would like to keep the calculation in use of this adjustment factor as open and transparent as possible.

MR. NEME: So Brandon, I think the -- I think where we're coming from on this is that because this hasn't been done, hasn't been used before, if it were to be adopted by the Board, it will be important to have some clarity about what it is that it will actually be covering and what it is that it won't be covering.

And in that context it seemed important to us not just to assume that we will figure it out later, but to have some clarity about, especially on custom projects, about at least what you're proposing it covers.

What I think I've heard you say thus far is in two examples is boiler base line assumptions and measure lives are -- first of all, are we correct in hearing those two, and are there any others besides those two?

MR. OTT: Hi, Mr. Neme. You are correct in hearing those two. The one other thing to quickly cull out -- and I know we have culled it our in our response here, but just to state again today -- we are absolutely viewing this adjustment factor to apply to other adjustment factors; namely net to gross, or any persistent adjustment factor that may come into play.

MR. NEME: Okay. So it would be those three, boiler base line, measure lives and net to gross? Or net to gross/persistent? For custom projects, it would be just those three things -- or four, depending on whether you treat "persistent" as separate from net-to-gross.

MR. LISTER: Sorry, Mr. Neme, we're just conferring at the panel.

MR. NEME: Mm-hmm.

MR. OTT: Thank you for your patience, Mr. Neme. From our perspective, the TAF should apply to any component of a custom project, which is, for lack of a better word, a very standard calculation.

So, to my knowledge, some custom projects will contain prescriptive elements. To the degree that there is a change in those prescriptive elements, the company is seeking this adjustment factor to ensure that both sides of the target equation are equalized for those changes.

And without being too repetitive, you are right. This is a newer mechanism for Enbridge, at least in recent history, and it is for that reason that we're hoping to work with stakeholders, namely the audit committee, to review how it is used and ensure that all parties are comfortable as we move to the Board for a clearance.

MR. POCH: Chris, I will let you follow up with the next one, which is part (b) which is related to this, which is in the absence of measure by measure built-up targets, how is this going to work. Chris, I will let you expand on that.

MR. NEME: Yes. So we understand that you didn't build up your targets on a measure by measure basis, that you looked at typical yields per dollars spent that you might expect from different programs and different market sectors.

And we were wondering how does TAF work in that context, because if you had built things up on a measure by measure basis, we could look at measure X where you were expecting to get 10 million CCM based in part on an assumed ten-year measure life.

And if it turned out the measure life was adjusted to 8, we could lower your target by 2 million because it was a 20 percent reduction in measure life and you had -- your target was comprised in part of 10 million CCM for that measure.

Without it being built up measure by measure, how are you anticipating the TAF would work --

MR. OTT: Fair question.

MR. NEME: -- mechanically?

MR. OTT: Of course. So fair question, Mr. Neme. First, just as a point of clarification, while in creating these targets the company did not create a specific or illustrative measure by measure build up, we just wanted to point out that there is implicitly a measure by measure build up in the targets that we put forward to a degree, because we did use past actuals and various averages and analyses of those actuals to inform our targets. So there is some element of that inherently embedded in them.

But more directly to your question, the TAF is like best available information, as required by the Board in the DSM framework, to be applied retroactively.

So to use your words, from a mechanical standpoint, the way that we envision this taking place is that the TAF will actually be calculated during the drafting of the draft evaluation report early in the calendar year following a given program year.

So at that time, based on actual results, the company will have a measure by measure build up and will be able to use that measure by measure build up to effectively run the DSM results twice -- once using the most recent or best available information and input assumptions, and once using the input assumptions that were used to develop these targets that are before us today.

And it would be with those two outcomes that the TAF would be calculated, again at that time when preparing the draft evaluation report.

MR. NEME: So can you talk us through an example of how that would work? So if you had a measure that, in your actuals, using the previously-assumed measure life of ten years produced 10 million CCM, and the measure life was adjusted down to eight, so you're only getting 8 million, so you've got 2 million less CCM with the lower best available information measure life, how would your target be adjusted?

[Witness panel confers]

MR. NEME: Are you saying your target would also go down by 2 million, or are you saying something else?

MR. OTT: The functionality of the TAF is more on a percentage basis on each CCM target on the company's weighted scorecard.

So it wouldn't be a firm CCM number reduction or increase that resulted from the TAF. It would actually be essentially a calculation of what is the percentage difference between CCM under the old input assumptions and CCM under these new input assumptions that are, at that time, the best available information.

And that factor, the target adjustment factor, would be applied to the company's target. Whether that be downwards as a result of reduced savings from changes in input assumptions, or especially as we start to talk about more blended quantitative, qualitative analyses like net-to-gross study, they could absolutely go the other way.

MR. LISTER: It might be helpful, Mr. Neme, to turn your attention to tab 2, Board Staff Interrogatory No. 8.

What Mr. Ott has just described is presented there, I think quite succinctly, in terms of the mechanics of the TAF.

MR. NEME: Which part?

MR. LISTER: It is part (b), I believe -- let's see if I have it right. It is tab 2, Board Staff Interrogatory No. 8, pages 3 through 7 -- no, I'm sorry.

Part (c), pages 6 and 7, describe the mechanics of the TAF at the level that Mr. Ott just described.

MR. NEME: Okay. I will take a look there. But can I restate what I think you have just said, and you can tell me if that is consistent with what is here?

MR. LISTER: Sure, why don't you try that.

MR. NEME: So it sounds like what you're saying, just to use a concrete example, is that if your actuals with the previous set of assumptions was a billion CCM, and after making however many adjustments -- let's say it was ten adjustments to different measures or programs, whether it is net-to-gross or measure life, or savings, or whatever -- that billion cubic metres instead became 900 million or 10 percent less, then your target would also be reduced by 10 percent?

MR. LISTER: That's essentially correct. So I will take you to page 7 of that response. I don't know if you have it in front of you.

MR. NEME: I do.

MR. LISTER: We have it here. Essentially, that example that you've just illustrated is presented in at that table here. I used five percent, not ten percent. But the mechanics of it work such as you've just described, where a new input assumption information is revealed that would generate otherwise lower achieved results.

So as a result, we adjust the target accordingly to maintain our position of actual performance.

And, again, this goes back to the basis of the view that if we're held to standards that we don’t even know about at this point, in terms of new input assumption information, then we don't even know what standards we're being held to.

MR. NEME: Okay, thank you.

MR. MILLAR: David would this be an appropriate time for a break?

MR. POCH: Sure, that will work.

MR. MILLAR: We will take our morning break. It is 11:10 now. Given our very busy schedule, I will keep this to 15 minutes right now. So the mics will be back on at 11:25.

### --- Recess taken at 11:10 a.m.

### --- On resuming at 11:25 a.m.

MR. MILLAR: Okay, welcome back, everyone. Mr. Poch, are you ready to continue?

MR. POCH: I believe I am. Mr. Neme, are you on the other line?

MR. NEME: David? I am. And maybe as we get started I can just say that during the break I went and looked at Mike Lister's suggestion that EP 22 answers GEC 16(b), and I confirm that it does. So I think we're all set there.

MR. POCH: Great. Okay. On topic 5, GEC question 20 next. This one is simply -- your answer has two columns with different numbers. Part (iv), page 3 of 4. You've got two sets of numbers for 2014. I wonder if you could explain that.

MR. NEME: I'm looking at it now. Is the first one meant to be 2013?

MR. PARIS: Yes, I was going to say, subject to check I assume that is supposed to be 2013.

MR. POCH: Let's assume that. You will let us know if...

All right. And in same tab, question 22, so tab 5, question 22. Page 470 of the PDF. We're looking at part (iii), and we asked for best estimate. You said you don't have a complete understanding, and we're happy with your best estimate. Can you give us some more information there?

MR. PARIS: So just to be clear. This is in -- you're looking for a best estimate of the forecasted per technology?

MR. POCH: Yes. By market size -- nor participants, or by participants.

MR. NEME: Market size.

MR. POCH: Market size.

MR. NEME: For the units --

MR. PARIS: Sorry, for the purposes of building our forecasts we did it on three-year historical averages and didn't necessarily forecast the per technology basis of the available market.

MR. NEME: We understand that that is not how you built your forecast, but we're asking you for the information nonetheless, because it has relevance to possible alternative ways of building a forecast.

MR. LISTER: Our response there in -- I'm not sure what sub-part, but sub-part (iii), page 6 just illustrates the difficulty of trying to achieve that with the number of technologies and applications and customer sectors and needs.

I'm not even sure that we could approach that question with any degree of accuracy, or even estimate it with any degree of accuracy.

As Mr. Paris just indicated, the way -- we know what we are capable of putting into the market and we have our data from the past several years, and we've created forecasts on that basis.

MR. NEME: So Mike, are you saying that for this whole list of technologies that you have no sense of what the size -- how many customers or -- on an annual basis each of these technologies would be applicable to? You don't know how many fryers, for example, exist in the service territory or have a ballpark estimate of how many fryers, commercial fryers, exist in the service territory that -- and what their turnover -- typical turnover rate would be and what that would translate into if you were doing a time of replacement program into how many -- how many units you could potentially influence each year?

MR. LISTER: If I could just have a moment to confer here at the panel.

[Witness panel confers]

MR. LISTER: Thank you, Mr. Neme. We were just conversing here at the panel that perhaps a good place to do that -- I don't know exactly where -- we're just trying to open it now -- is the potential study filed at Exhibit C, tab 1, schedule 1, I believe.

MR. NEME: Okay.

MR. LISTER: I mean, truthfully, if we were to provide you anything, that would be the source of it.

MR. NEME: Is there a place in that study where there is an estimate of the size of the market for each of the technologies? I mean, at some level there must have been in order to produce technical, economic, and achievable potential numbers, right?

MR. LISTER: Right. My recollection off the top of my head is that there is at least acknowledgement as to which technologies have the most potential.

I'm not sure that that specifically translates into a market size, without having sort of looked at the Navigant study in detail over the past couple of days.

MR. POCH: Our review, I am informed, suggests that Navigant presumably had that information, but it is not reproduced in its study. So I guess this becomes a question of an undertaking.

If you could go back and ask for the details for size of market and base line market share, I think it's the same issue from the -- that Navigant has by measure.

MS. OLIVER-GLASFORD: Okay. Sure. I mean, this might be helpful. So let's see if it is, and then we can kind of go from there.

MR. POCH: Mm-hmm.

MS. OLIVER-GLASFORD: For example, Exhibit C, tab 1, schedule 1, so the potential study, page 51 of 160.

MR. NEME: Sorry, Fiona, can you restate that?

MS. OLIVER-GLASFORD: Sure. So it is the potential study which is found at C, so Exhibit C, tab 1, schedule 1, and within this study at the top right-hand corner, it is page 51 of 160. And at the bottom of the page as per the study it is page 35 of the study, so you will see two numbers there.

MR. POCH: My read of that is, that's just a table for all gas, aggregated, for --

MS. OLIVER-GLASFORD: Yes. It is the technical potential as a percentage of sector sales. So that would be the total size of the --

MR. POCH: Yes.

MS. OLIVER-GLASFORD: -- of the sector.

MR. NEME: Right. And we want that. But in order to produce that number, they built it up measure-by-measure, and I guess what we're looking for is, what is -- what is the technical potential by measure? And how did they come up with those numbers by measure?

MR. LISTER: Okay, Mr. Neme. Going back to your previous invitation, we could take an undertaking to speak with Navigant to see if they could provide anything further on the size of that market.

MR. NEME: Great.

MR. POCH: And that's both about the size of the market and the base line market share, obviously. We need both, I guess. Chris, have I got that right?

MR. NEME: If they have it, but I think the more important one would be the size of the market.

MR. POCH: Okay.

MR. MILLAR: JT1.13.

UNDERTAKING NO. JT1.13: TO SPEAK WITH NAVIGANT TO SEE IF THEY COULD PROVIDE ANYTHING FURTHER ON THE SIZE OF THE MARKET AND THE BASE LINE MARKET SHARE.

MR. POCH: Thank you.

Again, tab 5, question 23 GEC, part (a)(i). Residential retrofit program.

MR. NEME: If I can jump in here, David, if this helps. I think in past conversations that we've had with the company when you were focusing only on getting at least 25 percent savings per home, I think you’ve told us that the estimate is that there are 400,000 homes in your service territory that are likely candidates to be able to get savings at that level.

And the question is now that you're focussing on a broader swatch of the market by looking for homes that can get at least 15 percent savings, how much larger does that 400,000 number grow to?

MR. LISTER: I guess just turning the page to start a response to that, I will just say, maybe we could turn the page.

We've attempted to provide what we see as -- I guess you might call it a technical potential for this market by making some assumptions.

To more directly answer your question, I am not sure that we have undertaken the kind of kind of estimate that you're now asking for.

There are some things that concern me a little bit with that kind of estimation that you are asking for, and relative to what numbers we might have provided you in the past.

Essentially, the reason why we're dropping the minimum requirement for the program to 15 percent is to, in fact, broaden the market.

However, having said that, it's also very -- this is a very budget-sensitive program. So to the extent we start to really increase the target, the budget necessarily follows. And it is an expensive program, because there are so many residential customers.

So I guess we could endeavour to try and figure out what that would mean in terms of the market size, which is what you're asking. But the implication seems to be that we could do more with this, and I guess what I'm suggesting is that we couldn't do more with this program without significant increases to the budget.

And we would also be looking at different budget estimates for marketing the program, relative to what we've built into the plan we've put before the Board.

MR. NEME: Well, I think we fully understand that this program -- you know, how many participants you can get to is at least partly a function of budget.

We are just trying to understand, you know, what portion of the market that you could get to, are you able to get to with the budget you've proposed.

And we know that you've tell us in the past that 400,000 homes could potentially get 25 percent savings. Obviously, if you’re talking about getting only at least 15 percent, that number grows bigger and -- I mean, it sounds like you're saying that to this point, you haven't estimated how much bigger and that might take a little work.

I think we're just trying to get a sense of whether there is an easy answer to that, and if there isn't, there isn't.

MR. PARIS: Chris, sorry, it is Jamie. You're right, we did a study in the past to find out how many customers could potentially save 25 percent and above. We haven't yet applied the same review to see about the 15 percent.

But roughly, when we were building up our targets and we did, we do have an understanding previously of customers who may have gone through the program, but didn't qualify, who would save less than 25 percent.

So that's kind of helped inform how it is that we build our forecasts.

MR. POCH: Can you give us whatever sort of estimate you drew from that? Obviously not a rigorous analysis, but you obviously drew some conclusion about --

MR. PARIS: Right. Immediately, I can draw you to GEC 23, response (c), where we have broken out the number of customers per gas savings percentage.

MR. NEME: Okay. So in that case, you've got roughly one-fifth of the homes that you touched on in that program were --

MR. PARIS: Less than 25 percent.

MR. NEME: So it is a quarter of the ones that you touched that were 25 and higher?

MR. PARIS: Correct.

MR. NEME: You're saying that is kind of -- at least at first blush, kind of a first indication?

MR. PARIS: Correct. That is one of the estimating factors that went into building our forecasted targets.

MR. NEME: But wouldn't that be a pretty conservative one, because you were intentionally targeting ones that you thought could get 25 or more. Then when you got to some of them, you found out that that may not have been true. If you were actually targeting the ones 15 or more, you might have hit a bunch of customers you wouldn't have been targeting in the past?

MR. PARIS: Sorry, could you ask that question again?

MR. NEME: Sure. Isn't this number that's in response to (c), the number that we're in the 15 to 20 potential range are only a quarter of the ones that were 25 and higher. Isn't that a pretty conservative number relative to what's really possible at 15 and higher because, in this case, where this number comes from was from a program where you were actually trying to get 25 and higher. And if you were intentionally targeting those you could get 15 percent and higher, you might have targeted a bunch of folks you weren't targeting here.

MR. LISTER: I don't think we disagree or dispute the fact that lowering the standard or the eligibility threshold would broaden the market. That was the intent of doing that -- again, subject to my concerns around what it would do to budget.

I just want to also note that the program isn't -- hasn't been designed to achieve only 15 percent. In fact, the evidence talks quite clearly about wanting to push customers into deeper levels of savings anyway.

All of that having been said, I think we're violently agreeing with you that opening the market, or opening the program to a lower eligibility threshold, would expand the market.

MS. GIRVAN: Julie Girvan here. Could I just ask a clarification?

Just on the screen here, are these the 2014 results from that program? So you actually had 5,200 participants?

MR. LISTER: Subject to check, that would be correct.

MS. GIRVAN: Okay, thank you.

MR. NEME: Okay, I think we can move on. I take it that -- my understanding of the sum of your answer is that you haven't done the same level of analysis that you did when you were trying to come up with an estimate of the eligible market for the 25 percent.

You know it is bigger. This is a conservative indicator that it is at least a quarter bigger, but how much more than that, you don't know because the analysis hasn't been done.

If that is a correct understanding, why don't we just leave it there. Is that fair?

MR. LISTER: That's fair.

MR. NEME: All right.

MR. POCH: Tab 5, GEC question 24, part (a); we were asking you about whether you considered upstream incentives, and you say you considered them.

Can you give us some more detail? What did that entail? Did you do any research? Were there any jurisdictional scans? What did you learn? Anything about the cost impact of going that route? And do you have any studies or memorandum that would contain those?

MR. LISTER: To my knowledge, there are not any internal memos or e-mails relating to this.

I do recall one or two conversations, and one we had with a stakeholder group -- and I believe Chris Neme was there, where we talked about some of our reservations or concerns around going after that market.

I just want to point out, too, at the beginning of the response -- because I do recall this response, I'm not seeing it in front of me. But we do indicate that we're very open to exploring that channel as a way to increase our results.

I'm not sure that what you're asking for -- certainly I don't recall having seen any jurisdictional reviews or any such document. So consideration meant, in this context, a few conversations. But beyond that, we haven't prepared ourselves to target the upstream segment, but it is something we're very open to doing.

MS. OLIVER-GLASFORD: And if I might add, we have been engaged -- just recently, we were added on to the working groups at the electric -- for CDM. And in those discussions, we understand that they're just starting to embark on looking at midstream or upstream-type programs.

So we will be engaged in those discussions and participating as appropriate and as relevant.

MR. POCH: Chris, you had a question on part (b). I'm not sure if I need to answer it; I will leave that with you.

MR. NEME: Sure. In part (b), you suggested that there are many challenges given the size of the marketplace, complexity of supply chain, geographic diversity, et cetera.

We're wondering if you could elaborate a little bit more on what you think those challenges are and why they couldn't be overcome, or perhaps you're not saying that they couldn't be overcome but you need to spend time to figure out how they would be overcome, or -- if you could elaborate a little bit more.

MR. LISTER: Yeah. I really think it's the latter. If it's all right with you, I would like to go back and explore that question with some people back at the office who are more intimately familiar with that, but it is more the latter.

I think what we're trying to indicate in the response is that it is much more complex than might meet the eye. We can take it away and try and document for you what the complexities are that we would see, and we've tried to just sort of indicate here at a high level what they might be, but perhaps we could provide you something more.

MR. NEME: That would be great.

MR. MILLAR: JT1.14.

UNDERTAKING NO. JT1.14: with referEnce to Tab 5, GEC question 24, part (B), TO ELABORATE ON WHAT THE CHALLENGES ARE AND WHY THEY COULDN'T BE OVERCOME.

MR. POCH: Thank you.

Moving on to question -- same tab, tab 5, question 25. In part (c) you explain how you got to your 75 participants being 10 percent of the 685 industrial customers plus the 90 institutional customers.

Our reading of part (a) suggests there is -- in addition to that there are many commercial customers in the target usage range beyond the 90 institutional. Is there a reason those were not targeted as well?

MR. LISTER: Yes. The way that we viewed this program was not -- let me try it this way.

Those customers might be eligible in terms of their volumetric consumption, but in our view, they're not ripe candidates for the program, given the intent and the expense of the program.

The program is really intended for very complex, primarily industrial facilities. That's not to mean that it couldn't include commercial facilities, but in our view and in our experience, those customers are better suited to different programs with a different sort of tactical approach and different outcomes, as opposed to the comprehensive energy management program.

MR. NEME: Okay.

MR. POCH: Okay. Turning to tab 2. Sorry, no. Avoided costs, I'm sorry, tab 9. And Paul Chernick is on the phone, and I think a few of these questions are avoided-cost questions which, if I need assistance, I am going to draw Paul in on, or if the answers obtained from you don't meet his needs, please, Paul, chime in.

Looking at question 30, which is PDF page 590, part (h), we asked you for the assumptions about the escalation to the later years, what those assumptions were based on, and you simply tell us it is based on a 2 percent escalation.

So can you give us a little more understanding of how you land at that?

MS. OLIVER-GLASFORD: It's not actually the DSM group that comes up with the forecasts for gas supply costs, and so that's a separate group at Enbridge that does that, and this approach to forecasting-out gas costs has been done for several frameworks now and is felt to be appropriate, given the volatile -- perhaps volatile nature, pricing in gas. It is hard to predict farther out than ten years, as I understand it, with any level of certainty.

MR. CHERNICK: But do you know how they got the 2 percent, as opposed to picking 4 percent or 5 percent?

MS. OLIVER-GLASFORD: The 2 percent, subject to check, would be based on an inflation rate at that point.

MR. CHERNICK: So this represents the expert opinion of your gas supply group, that the best estimate of future gas escalation is, it will just stay constant in real terms and just rise with inflation? Is that your understanding?

MS. OLIVER-GLASFORD: That's correct.

MR. POCH: Part (h) of that answer, Paul, I'm going to pass this one to you.

MR. CHERNICK: Oh. That was (h). You're moving on to (i)?

MR. POCH: Yes, sorry, moving on to (i).

MR. CHERNICK: Okay. Okay. On part (i) the key inputs on -- there was -- your response directed us to Exhibit B, tab 2, schedule -- excuse me, it is Exhibit B, tab 2, schedule 2 from EB-2011-0394. And it didn't seem that that answered the question about the actual assumptions used in the avoided costs that you filed in this case.

You know, what were the commodity prices, the differentials at the various supply points, the seasonal adjuster -- adjustment factors, the -- in terms of the differentials, and obviously the Henry Hub price varies by season, the load shapes, and we just got this answer of, look at this other case, which didn't -- obviously doesn't provide the assumptions used in this case, and I don't believe provides the assumptions used in that case, in terms of the key input assumptions for the gas avoided costs. It was sort of a general description.

Actually, in the 2012 docket there was a general description of the process. I'm not sure that we ever found anything in the 2011-0394 dockets that really address this.

So can you provide any clarification for that?

MS. OLIVER-GLASFORD: So is your question that you would like clarity on what the avoided gas costs were used? Or --

MR. CHERNICK: What were the inputs that gave you the avoided gas costs? I mean, avoided gas costs spit out something, we don't know what exactly. But what went into there? It is our understanding that you started with a Henry Hub forecast and then had differentials to each supply point and some kind of seasonal adjustment factors which affect the costs of each of the four load shapes. And none of that is provided here, and I don't think it is provided in the earlier cases that we were able to find.

MR. LISTER: We have -- this is Mike Lister. We have the -- it's, I guess, a correction maybe in the interrogatory response, but it is EB-2012-0394. We have that in front of us on the screen. Perhaps, Bonnie, would you mind scrolling down a little bit and we can have a really quick look at what is in there.

Changes to input parameter information. Is there a section below that? Changes to supply resources.

So it looks to me like there are input assumptions described quite well in that document. Is there something more that you were looking at?

MR. POCH: We're actually looking for the input values that underlie these avoided costs you use. You have given us a description here.

MR. LISTER: I see.

MR. POCH: I assume there is a --

MR. LISTER: Further down, Bonnie, is there an attachment or...

MS. OLIVER-GLASFORD: I would, subject to check, but I believe in our filing the avoided gas costs that were used in producing the plan would have those -- would have --

MR. LISTER: That looks like some values there.

MS. OLIVER-GLASFORD: -- them included as an appendix.

MR. CHERNICK: First of all, as a matter of clarification, are you saying that what you filed in 2015 assumed all of the same prices, differentials, and load shapes and so on as what you filed in 2012?

MS. OLIVER-GLASFORD: Well, for -- at the current time we have not yet updated our gas costs, our commodity gas costs for 2015. So we weren't doing that in Q3 of 2015.

MR. CHERNICK: So is the answer that you are still using 2012 forecasts?

MR. LISTER: Just to take us back to Mr. Poch's question, at table -- what page are we on there -- 7 of 10 in the schedule that is referenced, it looks to me like we do see the actual numbers that form the basis of the forecast.

MR. QUINN: It’s Dwayne Quinn here, if I could be helpful here? Bonnie had that ready, because I wanted to go through it in more detail later on. I looked through the data; the data isn't there.

MR. LISTER: No?

MR. QUINN: So I have some questions about updating that data. And if you haven't done the 2015 updated costs, Fiona, I understand. We don't need 2015 updated costs. You're looking forward, in this case, you know, some nine or ten years.

So it is just what is Enbridge using in this case as its forecasted gas costs moving forward? I have a number of questions in that regard, whenever it is our opportunity.

But to the extent that you need to take an undertaking here to give the base data, I think you won't find it in your own evidence at this point.

MS. OLIVER-GLASFORD: Mm-hmm, there is just one other place I might draw your attention to, and that is Exhibit B, tab 2, schedule 5, page 3 of 4.

MR. CHERNICK: Are we in the 2012 filing?

MS. OLIVER-GLASFORD: No, we're in our multi-year DSM filing. Just let me know --

MR. CHERNICK: Exhibit B, tab 2, 5?

MS. OLIVER-GLASFORD: Correct.

MR. CHERNICK: Yes.

MS. OLIVER-GLASFORD: Just scroll down to page 3.

MR. CHERNICK: Right. And again, you just have the avoided rates without any of the inputs?

MS. OLIVER-GLASFORD: Maybe I'm missing a piece of this question, but I believe that that's particularly why we started to talk about methodology, because it talks about how those are derived through NYMEX, et cetera.

So maybe I'm not clear on exactly what you're trying to --

MR. CHERNICK: You’ve described your general approach.

MS. OLIVER-GLASFORD: Mm-hmm.

MR. CHERNICK: How did you get -- what numbers did you multiply together, add together, and divide by something else to get the 18.823 cents for water heating load in 2016?

MS. OLIVER-GLASFORD: That is why the -- sorry, just one moment.

That's why the methodology is laid out on the background. So if I can point your attention to C -- so in our, again in our multi-year filing, C-1-4, pages 16 and 17.

I know that this is a general discussion of methodology, but it really does capture what we use.

For example, you know, avoided gas cost using the SENDOUT; we created the avoided gas costs using the SENDOUT model.

MR. CHERNICK: What did you put into the SENDOUT model?

MS. OLIVER-GLASFORD: I'm afraid that --

MR. CHERNICK: It's a 99 plan.

MS. OLIVER-GLASFORD: I'm afraid that would be out of my scope, so I will endeavour to undertake.

MR. CHERNICK: That's what we were asking, is -- this table 5 that you were pointing us to, I think that is what you were pointing us to, this talks about the calculations done for the 95 to 99 plans. So those are -- it is interesting to see that, but that doesn't have to do with what you did in 2012 that you are using today.

MS. OLIVER-GLASFORD: Yes. I guess, just as a point of reference, certainly we're using an approved methodology for coming up with the avoided gas costs and, you know, perhaps any debate around methodology used and those sort of things --

MR. POCH: My sense is we're talking at cross-purposes. What Paul is trying to get at is the numbers, the actual inputs, as opposed to a description of the method.

You’ve provided a description of the method, thank you. But what we would like is the actual numbers and the math behind the 2012 avoided costs that are being used in this case.

We understand they're likely to be revised, and we will come back to that question in a few minutes. But that is what we're after.

I appreciate that is beyond your bailiwick, so maybe we need an undertaking.

But have I got that right, Paul?

MR. CHERNICK: Yes. I mean I certainly hear that nobody there knows what they used, and I didn't expect anybody to answer this question off the top of their head.

I thought we would get a spreadsheet with the Henry Hub price by month, and then the differentials to the various points by month, and the purchases at the various points by month, and the load shapes defined by month, and whatever else is in there that produces the results we see in that table.

And I have now flipped to a different page, so I don't have it in front of me -- in B-2-5 on pages 3 and -- at page 3, I guess it is.

So basically what we're wondering is -- I mean, how can we check to see whether the numbers you've got in here under the rate columns on page 3, how can we check to see that those flow from reasonable assumptions about the inputs, because we don't have the input?

MR. POCH: So --

MS. OLIVER-GLASFORD: I think we're understanding the question now, Mr. Poch and Mr. Chernick. So we will undertake to provide that.

MR. MILLAR: JT1.15. Could the panel explain what they're undertaking to provide?

UNDERTAKING NO. JT1.15: ENBRIDGE to provide more clarity as to what is going into the avoided gas costs for the numbers shown on B-2-5, page 3.

MS. OLIVER-GLASFORD: We will be undertaking to provide more clarity as to what is going into the avoided gas costs for the numbers shown on B-2-5, page 3.

MR. POCH: Right, and just to amplify that, we're looking for a level of detail that would include such things as the commodity price basis, differential at each supply point relative to Henry Hub, the seasonal adjustment factors from NYMEX, for example, the month by month data, because you've got to do it that way to deal with the load shape of your various measures. Okay?

MR. CHERNICK: It's our understanding that you must have done it that way. Assuming you were use the SENDOUT model, it would have had monthly input and amounts would go in storage and they would come out, and things would be priced at various prices, and we just don't have any visibility of that.

MS. OLIVER-GLASFORD: Certainly. And can I just understand the purpose of getting that information?

MR. POCH: It is kind of multi fold. One, we think it is healthy to do a check on things, and there have been a number of areas, in both Enbridge and Union's case, where already as a result of interrogatories or enquiries, we've made or discussions we have had off line, we have uncovered errors or omissions and the companies have been able to correct those, that's great.

But if we can avoid having other errors go through undetected that, I think, is healthy.

But also we're looking at possibly propose he can alternatives, be it measures, emphasis on measures, what have you, and we want to understand where we're best going in that regard.

And to do that, we think it is best to understand the inputs to the avoided costs to, so we can make the shift in emphasis most effective.

Also, in this case, one of the biggest factors is constraining the companies, coming out of the guidelines is the Board's concern about rate impacts on non-participants.

And that is a function of not just of the program costs, but of -- you know, you can have mitigating impacts on rate impact. If some of these avoided costs are on the transmission and distribution side, if we avoid that, we lower the rate impact for non-participants.

So we want to be able to break that out, and that is why we now need this level of granularity.

MR. O'LEARY: Mr. Poch, if I may, just in an effort to try to move matters along here.

Certainly the company will make best efforts to the extent that it considers reasonable responding in this area, but as you know, this proceeding is not about considering changes to the methodologies which have been approved and revised over the last 20 years in respect to the company's gas supply plan, because it would involve not only Enbridge but also Union Gas. We could be at this for months.

MR. POCH: No problem.

MR. O'LEARY: So I understand where you are going with this, and we are going to respond as best, but certainly the extent of the response will be informed by whether or not it is truly an issue that is going to be considered by the Board in this proceeding.

MR. POCH: Okay. Let me give you some comfort. We're not here to propose a change to the company's gas supply portfolio plan. That's not -- I agree that's a level that we're not taking this to.

It is more, we want to be able to understand and be able to demonstrate implications, for example, for rate impact, as I just explained, rate impact for non-participants of a shift in measure emphasis, for example.

Topics that are on the agenda in this case, cost-effectiveness, screening, avoided costs, and to understand that we need to understand these -- all the impacts on rates that flow from a shift in measure, and --

MR. MILLAR: Gentlemen, maybe we can -- let's focus on questions and answers. You have been 20 minutes on this question, and I am very conscious of the time.

MR. POCH: Sure. Anyway, I think we have an undertaking?

MR. MILLAR: Yes, we do.

MR. POCH: Let's proceed. Question 33. Same tab, tab 9. Part (a), you indicate that Navigant determined that, contrary to your assumption, your avoided costs are already captured, some of these upstream avoided costs and transmission in particular.

We would like to know -- we asked you -- sorry, I've lost the question here.

MR. CHERNICK: Do you want me to take over here, David?

MR. POCH: Yes, go ahead, Paul.

MR. CHERNICK: We wanted to know how your consultant reached that conclusion so we could follow it through and see whether we agree that all of the transmission is captured, which means transmission to where, what delivery points are you using? I mean, presumably in order to reach that conclusion they would have had to know that you were using gas commodity and external pipeline cost to charges for delivery to particular points, and that that captured all of the transmission costs. And we just don't -- we don't know how they reached their conclusion, and if they had a basis for their conclusion we would like to see it. Presumably you gave them something that demonstrated that you were capturing all of the upstream transmission costs and/or they did some analysis given the materials you gave them. We haven't seen that.

MS. OLIVER-GLASFORD: Okay. It is my understanding that the avoided costs were reviewed in EBRO 492 and 495, finding those impacts to be very small at the time, but certainly we did contract with Navigant, and I will seek to connect with them and respond accordingly.

MR. POCH: Let's deal with that as an undertaking then.

MR. MILLAR: JT1.16.

UNDERTAKING NO. JT1.16: TO CONNECT WITH NAVIGANT AND RESPOND ACCORDINGLY RE: AVOIDED COSTS REVIEWED IN EBRO 492 AND 495, AND TO BREAK DOWN BY LOAD TYPE THE TRANSMISSION COSTS, AND TO IDENTIFY WHAT PORTION OF THOSE AVOIDED ENERGY COSTS ARE IN FACT COMMODITY VERSUS WHAT PORTION ARE AVOIDED TRANSMISSION, CAPITAL INVESTMENTS.

MR. POCH: Thank you.

And if in answering that, if possible, with respect to the transmission costs that are part of the avoidable costs, can you describe -- can you break that down by load type?

MS. OLIVER-GLASFORD: Yes, we will do our best.

MR. POCH: All right, thank you.

I think we will come back to avoided costs in a minute, but on the same interrogatory. This is still avoided costs, excuse me.

Go ahead if you have got it in front of you there, Chris --

MR. NEME: Before you move on from -- just one other clarification on the undertaking. I think the undertaking is, as I heard it, was that Enbridge was going to check with Navigant to have them explain how they got to the conclusion that the avoided energy costs already included avoided transmission costs. And that's helpful. I think, if it's possible, within the same undertaking, to -- that if, in addition to explaining how they got to that conclusion, if they could identify what portion of those avoided energy costs are in fact commodity versus what portion are avoided transmission, capital investments, I think that will be important as well.

MR. POCH: Can you include that in the undertaking, subject to availability?

MR. CHERNICK: There may be a third category of payments to third parties for transmission services.

MS. OLIVER-GLASFORD: Okay.

MR. CHERNICK: At the delivery point, and then paying TransCanada, for example, or Union to get the gas from that delivery point. Then there may also be some transmission costs related to your -- building your own projects.

MR. O'LEARY: So would the undertaking --

MR. CHERNICK: Make categories out of Chris's to.

MR. O'LEARY: So would the undertaking then be to ask Navigant for a response? Or are you looking for something further?

MR. POCH: I think that is up to the company. I mean, if you have relied on Navigant to develop these numbers then we want to know what Navigant used for those various factors and what went into it, which they may in turn come back to what the company gave them, or they may have gone to exogenous sources, but that's fine.

MS. OLIVER-GLASFORD: We will do that. I just want to call out, though, that this change, even in the study, you know, it is to the amounts of kind of a 1 percent to 4 percent increase.

So as we look at different methods and we, you know, spend the time going into there, which, you know, we can follow up as we have committed to, we might be talking about a fraction of a percent difference in an avoided cost. I'm speculating there, but, you know, in terms of changes, we don't suspect that there's anything here that is material in nature to --

MR. POCH: It's not just the changes we're after. It is just understanding where the impacts come from, because we, in turn, want to be able to quantify when we change a portfolio, to what extent the avoided costs -- the change in avoided costs is visited -- is enjoyed by all customers, as opposed to just participants, so that is what we're trying to get the breakout here -- it's one of the key reasons, anyway.

MS. OLIVER-GLASFORD: Okay, thank you.

MR. POCH: Turning to question 34. Under "cost-effectiveness" -- sorry?

MR. CHERNICK: I think you skipped one, David, on 33(b).

MR. POCH: Go ahead again, yes.

MR. CHERNICK: You asked about how the investments envisioned in the recent GTA pipeline case or future needs were captured in the current avoided cost estimates, and we got an answer having to do with costs being divided between -- costs being attributable to load growth and other reasons.

I would like to have a breakdown of how the various projects were dealt with, in terms of how much of each actual and projected project the company decided was attributable to load growth.

There was another case where we asked for what we thought we were asking for, an explanation of how you got your numbers, and you gave us sort of a process answer, which was nice.

MS. OLIVER-GLASFORD: Well, we seek to be helpful. We will take that as an undertaking, because I feel like I've seen a breakdown on that, so I will take that as an undertaking.

MR. MILLAR: JT1.17.

UNDERTAKING NO. JT.17: TO PROVIDE A BREAKDOWN OF HOW THE VARIOUS PROJECTS WERE DEALT WITH, IN TERMS OF HOW MUCH OF EACH ACTUAL AND PROJECTED PROJECT THE COMPANY DECIDED WAS ATTRIBUTABLE TO LOAD GROWTH.

MR. POCH: Thank you.

All right. Then turning to question 34, which is tab 8. Topic 8. Part (a), can you give us some information on what the 12-year average measure life is based on?

MR. OTT: Sure, I think I can offer a few points of clarification on the information that is presented to us here.

So over the years, quite naturally, Enbridge has found a need and helpful use for an ability to communicate the macro impacts of its DSM activities.

Perhaps -- I want to say somewhere between ten to twelve years ago, subject to check, the average measure life at that time was around 12 years, and that was seen as a sufficient method for taking annual cubic metre reductions, because at that time we were not operating in a framework that measured cumulative cubic metres; we were operating under a TRC-based framework.

So it was seen as an acceptable measure life for taking annual cubic metre reductions, and playing them out over time to come up with a very high-level macro communication-type figure to express the value that DSM brings to society.

So that figure is the 8.8 billion cubic metres that is referenced here. But to provide a point of clarification, we do now measure our results using cumulative cubic metres. So subject to check, I believe back to 2008, though it may be 2006, the figures presented to you in this table will be using the actual measure lives recorded for each install measure or project that the company undertakes in those years. Older years will be using an assumed 12-year measure life.

The other clarification I can offer is that the 8.8 billion cubic metres will not, or should not equal the sum of the cumulative cubic metres presented in the table in response to (b), the reason being that in response to (b), the company has provided year over year lifetime impacts of the efforts that it undertook in that year, wherein the 8.8 billion cubic metre figure is, to put it one way, a snapshot in time to describe the actual physical reductions in gas consumption that took place between 1995 and the end of 2013.

So presumably, in the 2006 right up to 2012-2013 time frame, there are results there that have yet to be captured in that 8.8 billion cubic metre, because they haven't physically taken place.

MR. POCH: So when we’re reading the response to part (a), when you say the sum of lifetime gas savings, it is just for the period ending -- it is not actual lifetime savings; it is for the period ending --

MR. OTT: That's correct, yes.

MR. POCH: -- whenever it is.

MR. OTT: Very fair characterization, yes.

MR. POCH: Okay. I think that answers my next question, too.

I wanted to get a clarification on part (e) of your answer. In the table which is on the next page, we wanted to understand the total gas used in the province and -- sorry.

MR. MILLYARD: These are the same past volumes. The same question arises with respect to future volumes in a another interrogatory.

MR. POCH: All right, we will deal with this twice. They report zero -- do these volumes report zero gas for Rate 125? Do they include wholesale gas, the 200 that is headed out of the province?

We're trying to get at what is being burned in the province.

MR. MILLYARD: Maybe I should add on to this. We asked another question for the planned year volumes in which you referred us to some tables in your pre-filed material that had it broken out by rate class.

There, there are no volumes shown next to rate 125 --although those are power plants, so we assume they're significant volumes.

That is the first question. Do you know why that says zero, and do you not have a record of those volumes?

MS. OLIVER-GLASFORD: Subject to check, but those volumes would probably be accounted for in the other rate classes usage, I would suspect.

MR. OTT: I think you will hear another subject to check here. But subject to check, the rate 125 is on a contract-demand basis. So in that sense, that unbundled rate is for customers that not only look after their own supply; they're looking after their own load balancing. It is not even a service we provide in that sense.

So on sort of an official public record level, we typically do not report those volumes. I suppose we could undertake to see what we have as far as those, understanding the intent of what you would like to see, but with the caveat that I am not entirely sure what we will find in that search.

MR. CHERNICK: Brandon, just a quick follow up to that. Does that confirm that the volumes that are shown on page 3 of 3 for GEC 34 do not include rate 125 consumption?

MR. OTT: Subject to check, I would say that's the case.

Given that it sounds like we're working towards an undertaking on this particular topic, we could roll that in, to verify whether or not rate 125 volumes were included -- was my microphone off the whole time?

MS. OLIVER-GLASFORD: No.

MR. MILLYARD: Did I hear you say you think they may be double counted?

MR. OTT: No.

MR. MILLYARD: They're not shown somewhere else?

MR. OTT: No, I do not believe they're shown somewhere else.

MR. POCH: If you're going to provide us with an undertaking to clarify that, then let's at the same time include table 2 of tab 2, schedule 4, at page 3. This is Exhibit B, tab 2, schedule 4.

You've got a gas consumption throughput column there, and the same clarification is sought.

MR. GLUCK: This will be JT1.18.

UNDERTAKING NO. JT1.18: ENBRIDGE to verify whether or not rate 125 volumes were included with reference to table 2 of Exhibit B, tab 2, schedule 4, at page 3.

MR. MILLYARD: So that was rate 125. I gather Rate 300 is in a similar category. There was somewhere you suggested that although there is a volume showing here, is that volume reliable?

MR. OTT: I would certainly call that volume reliable. So it is volumes -- we can undertake to include that in the previously-noted undertaking.

But subject to check, I would believe that Rate 300's volumes are included within those figures presented in both referenced tables.

MR. MILLYARD: Okay. And for rate 200, I gather this is wholesale?

I gather these are wholesale volumes for rate 200; there is only one customer. Is that to a distributor within the province, or is that leaving the province?

[Witness panel confers]

MR. OTT: Those volumes will be leaving the province.

MR. MILLYARD: Great. Then we're not concerned about them. We would prefer them to be removed from these summary results.

Our goal was simply to understand how much gas is being used in Ontario. So we would like to see if there is some in rate 125, and if the wholesale is leaving the province, please leave it out.

MR. OTT: Okay. If I can play that back for you, if you don't mind. Are we looking for a recreation of the table on T8.EGDI.GEC.34, page 3?

Subject to the removal of any 200 volumes therein, any inclusion of rate 125 volumes in the event they are not included?

MR. MILLYARD: Yes, and the same thing for the other interrogatory that has them for the plan years, in which you simply referred us to the pre-filed evidence and the tables there.

MR. POCH: Which would be B, tab 1, schedule 2, question 35, GEC 35, I think?

MR. MILLYARD: Yes.

MR. POCH: Okay, thank you very much. Turning to question 38, which is --

MR. CHERNICK: Tab 3.

MR. POCH: -- yes. Topic 3, question 38. Sorry, I think I heard someone say that, but...

MR. NEME: Yes, it is Chris, sorry.

MR. POCH: Yeah. And there was an outstanding part of the question here.

MR. NEME: I can jump in here, David.

MR. POCH: Go ahead.

MR. NEME: I think we understand better now that the -- your savings -- proposed savings targets weren't built up measure-by-measure. But we presume that you do have, for example, for the prescriptive C&I programs, measure-by-measure rebate levels that you are proposing, that would be part of your -- ultimately roll up to your budgets. Can you provide those? Or are they somewhere in the filing that we have missed?

MR. LISTER: I thought they were somewhere in the filing. Off the top of my head I'm not going to be able to --

MR. NEME: If you could point us to where -- either point us to where they are in the filing or if they're not in the filing give them to us, that would be great.

MR. LISTER: Okay. Why don't we do that. By the end of the day I will try to find them for you. If I can't, then should we do something like that, or should we just --

MR. POCH: Let's put a number to it, just so we don't lose track of it.

MR. LISTER: I'm sorry?

MR. MILLAR: JT1.19.

UNDERTAKING NO. JT1.19: ENBRIDGE TO PROVIDE THE PRESCRIPTIVE C&I PROGRAMS, MEASURE-BY-MEASURE REBATE LEVELS THAT ARE PROPOSED, THAT WOULD BE PART OF THE BUDGETS.

MR. LISTER: Okay.

MR. POCH: Under topic 2, GEC question 40, my question has actually written up this question, just because it is a bit difficult, and I am confident it's going to have to be an undertaking. I think he provided it to you and the court reporter and your counsel with this.

Have you had a chance to look at that question?

MS. OLIVER-GLASFORD: We will -- we have our Navigant expert on hand today, and we will, if it would be all right, have him respond to questions perhaps post-lunchtime. We can be more responsive, perhaps.

MR. POCH: Okay. We will come back to that then.

Avoided costs, tab -- this is question 43, which is --

MR. NEME: Topic 9?

MR. POCH: Topic 9.

MR. POCH: Paul, I will let you deal with this.

MR. CHERNICK: Okay. There were a couple of things that seemed very strange about the --

MS. OLIVER-GLASFORD: Sorry, would you confirm which IR you are on?

MR. POCH: 43, tab 9, GEC 43.

MS. OLIVER-GLASFORD: Great, thank you.

MR. CHERNICK: In (a), under "space heating" -- this is at the top of page 2. Under "space heating and space and water heating", the transportation costs, so down over time from 2016/'17, they drop off fairly dramatically to 2020, and then rise very slowly. That seemed kind of odd. Not necessarily inexplicable, but not totally obvious as to why that should happen.

The second thing that struck me looking at this table is, the units of avoided cost -- avoided storage cost for space and water heating was, in some cases, higher than either the water heating or the space heating storage costs, and it seemed like space and water heating should be some mix of water heating.

If you look down, say, at the 20 -- like 2029 through, I think, 2035, you see, you know, 11 or -- .11 or .12 cents per cubic metre, and consistently per space heating and water heating, but space and water heating is a little higher.

But we were just trying to understand how the model was producing those results, and if some clarification could be provided about why transportation costs or some of the -- some of the load shapes fall so dramatically by the storage costs for space and water heating...

MS. OLIVER-GLASFORD: Perhaps I can jump in here. I think, given the level of specificity and detail you are looking for, I will have to seek to take an undertaking on this type of a question. And so I will take an undertaking on this particular question.

MR. MILLAR: JT1.20.

UNDERTAKING NO. JT1.20: ENBRIDGE TO PROVIDE SOME CLARIFICATION AS TO WHY TRANSPORTATION COSTS OR SOME OF THE LOAD SHAPES FALL SO DRAMATICALLY BY THE STORAGE COSTS FOR SPACE AND WATER HEATING. ALSO TO PROVIDE THE INPUTS THAT WENT INTO THE SUPPLY TRANSPORTATION AND STORAGE COLUMNS IN THIS COST.

MR. POCH: So clarifying those two observations about the table.

MS. OLIVER-GLASFORD: So just to be clear, just confirming how the space and water heating is derived.

MR. POCH: All right.

MR. CHERNICK: Down in part (c) we asked for the source documents supporting those avoided costs, and you referred us back to part (b), which referred us to EB-2012-0394, which is basically the same issue that we were having before, where we asked for a calculation of numbers or the inputs to calculations directing us back to a general discussion on methodology.

So again, if you could take an undertaking to just get us the inputs that went into the supply transportation and storage columns in this cost, it would be very helpful.

MS. OLIVER-GLASFORD: Okay, we will undertake best efforts to provide what inputs we can do.

MR. MILLAR: Is that the same undertaking, or is that...

MS. OLIVER-GLASFORD: That would be the same undertaking.

MR. MILLAR: Okay.

MR. POCH: I will let you carry on, Paul. I think the next one is question 44 under tab 9.

MR. CHERNICK: Yes. And our first question was for your forecast of gas commodity prices at relevant hubs, and you didn't answer that. I am happy to take that confidentially, but it is important to understand what the company knows about the consensus or lack thereof with respect to future gas prices. And it's not clear from the answer whether you have forecasts other than the PIRA forecast or whether that is the only one you look at.

MR. O'LEARY: I could perhaps respond first to this question, if there is anything else the panel can speak to. But certainly I am aware that the PIRA contract does require that the information be treated confidentially, and we are, therefore, not at liberty to disclose it. And that is common not only to this jurisdiction but all of the jurisdictions that I am aware of, that they provide information to utilities virtually across North America. So it is not unique to the situation here.

And the extent of the information we question, given the size of it and the detail and the fact that it is their model that is being used, how it could be of benefit for the purposes of this proceeding, and it is for that reason that we respectfully decline responding. Whether there was other information that was relied upon, the panel can speak to. But certainly in respect to PIRA, that answer remains correct.

MR. POCH: Let's get an answer to that other question first, which is: Were other forecasts involved here other than PIRA's?

MS. OLIVER-GLASFORD: I am not aware of any, subject to check.

MR. POCH: All right.

MR. CHERNICK: So the -- so is the status that you used a forecast of gas prices at various hubs to derive your avoided cost calculation, but you are not willing to provide that forecast even under a confidentiality agreement?

MR. O'LEARY: We are bound by contract to not publicly disclose the document, and that includes the parties to this proceeding.

MR. POCH: Can I just get a clarification? Does that contract allow you to disclose where ordered to by a Board, with due protections for confidentiality?

MR. O'LEARY: I would have to check the contract. But obviously, we would consider and respond to any order that the Board issues, to the extent that we are required to by law.

MR. CHERNICK: In other jurisdictions, we routinely get commodity price forecasts under confidentiality agreements, which go by various names in various jurisdictions.

So I would be very surprised if they had a special rule that said nobody can see their numbers.

Again, we're not interested in their model. We just want to see the -- basically the report that they gave you that has, I would assume, the monthly gas commodity prices at the various hubs.

Generally, these reports have some discussion about what they think is driving the gas prices.

So again, we're not interested in their model. We're not interested in any of their property. We just want to see the results that they used that were inputs to your --

MR. O'LEARY: As the answer suggests, we don't necessarily agree that providing that is going to be of any benefit to the Board in this proceeding. We relied upon the forecasts for the purposes of developing the various plan outcomes.

That's the process and we don't believe, as I have indicated before, that issues related to avoided costs, to the specificity that you are suggesting, is relevant for the purposes of this proceeding.

MR. POCH: Okay. We will take that under advisement and consider whether or not to raise this by motion, thank you.

MR. O'LEARY: Perhaps you can tell me, Mr. Poch, how would the production of this information be helpful to the Board?

MR. POCH: Well, you have just indicated your answer that you are not providing it. So rather than do it here and spend more time, we will decide whether we want to bring a motion and we will make our arguments there.

MR. CHERNICK: Could I just ask a little bit of quick clarifying follow-up?

Are you saying that nothing in your filing depends upon the avoided costs, and the avoided costs are irrelevant to your recommendations and to the Board's decisions in this case?

MR. O'LEARY: No. Avoided costs have been developed using the protocols and methodologies that had been approved by the Board in the past, and are going to be subject of further review later this year.

MR. CHERNICK: But later this year the program will already have been set for a five-year period, is that right? I may just be confused about the process here. I am just asking.

So it seems to me that -- what I don't understand is how you can say the avoided costs don't matter unless -- I mean, did you get a decision from the Board saying you can take whatever PIRA gives you, and just use those numbers and we will never question whether those are the right numbers to use?

MR. O'LEARY: Our position is that the processes that have been followed for the purposes of developing Enbridge's, and presumably Union's, plan in this proceeding have been done in accordance with the currently approved methodology and protocols, and that this proceeding is not going to be looking into whether or not those protocols should be changed strictly for DSM purposes.

MR. CHERNICK: And are you saying that the protocols include unexamined reliance on the PIRA forecast, that that's a protocol that the Board has accepted and mandated?

MR. O'LEARY: I'm saying that what we produced is what we believe is necessary to support this application.

MR. MILLAR: Mr. Poch, this comes out of your time allotment, so is this worth pursuing here?

MR. CHERNICK: I was just trying --

MR. POCH: As I said, a motion -- it seems pretty clear to me the Board has put avoided cost as a topic on their topic list.

I don't know what my friend's concern is, but we will deal with it that way because we're going around in circles.

Let's move on to part (b) there if you would, Mr. Chernick.

MR. CHERNICK: Yes. Part (b) our question was just -- you gave us some data on annual prices, and obviously the monthly prices matter for the various load shapes.

And so if you could just amend that that response by providing a table of the monthly responses rather than -- the monthly prices rather than the annual prices, that would be very helpful.

As far as I know, gas is always traded on a monthly basis.

MS. OLIVER-GLASFORD: We will seek to prepare that as an undertaking on best efforts.

MR. MILLAR: JT1.21.

UNDERTAKING NO. JT1.21: ENBRIDGE To amend the response to provide monthly prices rather than annual prices

MR. POCH: Does apply to part (c) as well, Paul?

MR. CHERNICK: Yes, let me just check first. I am flipping back and forth between a number of documents here, so --

MR. POCH: As are we all.

MR. CHERNICK: Yes. And if the answer is -- the answer seems to be that you don't have a separate forecast of gas basis. You just -- you had forecasts for the various hubs, and you calculate the bases from those.

So in that case, answering (b) on a monthly basis would give us what we need on (c).

MR. POCH: Okay. Turning to question 45 under the same tab, the topic is avoided costs, and I just want to understand the answer.

Do we understand you're going to be updating all of the input assumptions in Q3?

MS. OLIVER-GLASFORD: We are updating the commodity portion, as subject to check, in Q3.

MR. POCH: Just commodity?

MS. OLIVER-GLASFORD: Correct.

MR. POCH: Okay. And we asked in that question for any internal memorandum, and none were provided. Is that the case, that in fact that is the answer, there is none?

MS. OLIVER-GLASFORD: I'm not aware of any. I could not find any.

MR. POCH: Okay. You've just indicated in these last two discussions that you are planning to update voided cost in Q3.

What is the process that is envisioned, in terms of this Board's review, or the use of these before any Board review?

MS. OLIVER-GLASFORD: At this point, we had planned to use the methodology that we've used up to this point and file them with our evaluation report or audit report next year. Sorry, Ravi?

MR. POCH: Go ahead, Ravi.

MS. SIGURDSON: Okay. I just want to remind -- for avoided costs, prior it was TRC. So our incentive is based on CCM.

So just to remind everybody that the TRC or avoided costs -- I think Mr. Chernick had asked this question earlier to ask how does avoided costs play into our plan.

So I just want to share that it is a TRC screening piece. The incentive itself is based off of CCM. I think that is an important reminder.

MR. POCH: That's helpful. I assume you are still going to be using avoided costs or TRC for --

MS. SIGURDSON: Absolutely.

MR. POCH: -- screening purposes of custom projects, specific project screening and so on?

MS. SIGURDSON: Absolutely, yes.

MR. POCH: I am wondering if you have a proposal, if you have put forward a proposal anywhere yet about whatever vetting process will apply to these new avoided costs before you use them?

MS. SIGURDSON: So we file the avoided costs -- and this is what Ms. Oliver-Glasford was referring to earlier -- with our draft evaluation report.

That is subject to an audit review. So in that way, there can be questions around the avoided costs used and the methodology used.

MR. NEME: But, Ravi -- this is Chris -- you know, I have been on your audit committee for a long time. I don't recall the auditor ever scrutinizing the accuracy, or the calculations, or anything underpinning any new proposed avoided costs.

Are you suggesting that will start happening in the future?

MS. SIGURDSON: The auditor -- we don't direct the auditor on what piece of evidence they should look at. They have never been prohibited from that if that is an area they wanted to look into it, and if that made sense in the realm of DSM.

MR. NEME: But that’s not the -- you do give them a scope of work, and the scope of work never -- at least to my recollection of it, never said --

MS. OLIVER-GLASFORD: But the avoided costs are the matter of a methodology approach. So, you know, the methodological approach is something that the auditor could review and make sure that we've followed that approach that's been approved by the Board, and typically the framework processes.

But, you know, as terms of, if where you're kind of leading is that they would actually question, did we even approach avoided costs properly, that's not been within the scope of an auditor's purview.

MR. NEME: You're anticipating that it will going forward, that will be the vetting process, or --

MS. OLIVER-GLASFORD: No. That wouldn't be -- no, they would review that we've, that we've, you know, shown the avoided costs and they follow the approved methodology as per the Board.

MS. SIGURDSON: We report on the TRC accuracy, so that is part of the auditor's purview to say, okay, what was the overall TRC, are the calculations correct, so that is all within the auditor's scope.

MS. OLIVER-GLASFORD: So the mechanistic calculation of TRC out of the avoided cost.

MR. POCH: Okay. So I think the answer to my question is you are not proposing any vetting by the Board. You are just proposing that the auditor -- it is available to the auditor to enquire into this, if that is the will --

MS. OLIVER-GLASFORD: That's correct. If it is deemed that a methodology review is necessary, then that's, I guess, the decision of the Board in a framework context.

MR. MILLYARD: Aren't the avoided costs that go in that report the ones that are going to be used for the next year? Isn't that the point, is you are putting them on the record so that they're on the record now like all the other input assumptions are already on the record?

MS. SIGURDSON: The avoided costs that we file with the -- we file the avoided costs that were used for the particular year that is being audited.

So for example, for the 2013 audit we would have filed the avoided costs that we used for the 2013 year.

MR. MILLYARD: And you no longer put the 2014 avoided costs in that report?

MS. SIGURDSON: Those reports -- so as per the framework we are filing input assumptions on an annual basis.

So for example, when the avoided costs are updated in Q3, then they will be filed at the next possible juncture, which should be towards the end of Q4.

MR. POCH: So I guess what I'm hearing is the first time anybody gets to look at your new avoided costs for, say, the year 2016 will be sometime in late 2017 when that year is being audited, or 2018, perhaps?

MS. SIGURDSON: No.

MR. POCH: Did I misunderstand --

MR. MILLYARD: No. Did I hear that you are going to start filing the avoided costs along with the updated input assumptions each year?

MS. SIGURDSON: If the avoided costs were ready at the same time as the input assumptions, which we strive to file on an annual basis towards December, then we would file them.

MR. MILLYARD: And if they're not ready?

MS. SIGURDSON: Then we will file them as soon as they are ready.

MR. MILLYARD: As a separate filing?

MS. SIGURDSON: We tend to try to file them along with the input assumptions. For example, last year we didn't end up filing our input assumptions until March. So there is an exception. So once they are ready at the earliest juncture we would file them along with another proceeding.

MR. POCH: Okay. I am going to just ask Mr. Chernick -- I think our questions on question 47 have already been responded to. Is that correct?

MR. CHERNICK: Yes. I think we have pretty much touched this, and some of it has been taken as an undertaking and some of it is not clear whether we're going to get.

MR. MILLAR: Mr. Poch, we're getting close to lunchtime. Would this be a convenient time?

MR. POCH: We can take a break. In fact, I think a number of our questions going forward now may have been dealt with in one way or another, and it might be productive for us just to skim through that and see if we can avoid some of them now.

MR. MILLAR: Okay. Why don't we do that. I am going to suggest a slightly shorter lunch break than normal. Why don't we come back to twenty to two o'clock, if that works for everybody? Okay. Thank you.

### --- Luncheon recess taken at 12:51 p.m.

### --- On resuming at 1:40 p.m.

MR. MILLAR: Okay, welcome back, everyone. Mr. Poch, back over to you.

MR. POCH: Mr. Neme, are you on the phone?

MR. NEME: I am.

MR. POCH: Okay, great. If we could, let's just depart from avoided costs for a minute, and we put aside one from topic 2, GEC number 40, where we had tried to get some clarification on how the model works.

I understand that Mr. Wood from Navigant is able to help us with that. Chris, I will let you and he talk.

MR. NEME: Sure. So we had the follow-up question that Mr. Millyard had provided in advance. It was a request to walk through another example on the spread sheet of the outputs from the potential study that had been provided by Enbridge, that I understand Navigant had generated.

And it refers to the base case tab. I believe the numbers in it actually come from the scenario I tab, but the concept is the same. It is in row 24, and it notes that both the technical and economic potential in 2015 for a time-of-replacement year for condensing boiler in commercial buildings was about 2.3 million cubic metres, and it stays at roughly that level for each year.

But then when you get to the annual incremental achievable potential in columns CB in the spreadsheet, it shows the achievable potential in the first year to be about 58,000, so about two-and-a-half percent of the economic potential in that year. And then it drops down to about 18,000 in 2024, or less than one percent.

So the question is: Are we interpreting these numbers correctly? If it says 58,266 incremental annual achievable savings in 2015, and that's two-and-a-half percent of the achievable potential of 2.3 million, are we reading that correctly?

MR. WOOD: Hi, Chris, this is Glenn Wood. Yes, you are reading it correctly. I think the missing element is that when you are looking at the technical and economic potential, they don't take into account stock turnover.

So they are essentially estimated as if you could instantaneously replace all of the stock, whereas --

MR. NEME: Even for the replace on burnout measures --

MR. WOOD: Even for the replace --

MR. NEME: -- the economic potential each year is a function of the total stock, not the portion of the stock that it is turning over.

Mr. Wood: Exactly. So similarly, to the earlier question that you posed about the Excel file, in this case the boiler is a measure with a 25 year life.

So about 4 percent -- so four percent of the boilers would be replaced on burnout each year.

So the ratio that you are seeing, the two-and-a-half percent of the economic potential that you are seeing as the achievable potential in year one, in 2015, is about 63 percent of the boilers that we're turning over in that year, or the potential associated with the boilers turning over in that year.

Just to complicate the question a little bit further, if you look at line 21 or, sorry, looking -- staying with line 24, if you who can at column G, you will notice that that measure is part of a competition group, which means that base boiler can either be replaced by a near condensing boiler or by a condensing boiler.

MR. NEME: Okay.

Mr. Wood: So those measures compete within the model based on the attractiveness, the economic attractiveness and market acceptance.

So if you look at line 21, which is the condensing boiler, you will see that the percentage of the potential associated with that measure is quite low in year one. But over the period out to 2024, the proportion of standard boilers that are replaced by near condensing boilers becomes less, and the percentage that are replaced by condensing boilers becomes higher.

So over time, the economics of the condensing boiler improves and you will see a higher percentage of those measures winning out in that competition.

MR. NEME: Got it.

Mr. Wood: So essentially, the bulk of the difference that you are seeing has to do with just the fact it is replacing stock turnover in the achievable potential, but not in the economic potential.

MR. NEME: Okay, so two follow up questions. So if I were to add in 2015 the savings from the near condensing to the condensing, I would add 58,000 and change to 4,000 and change, and I’d get about 62,000 and change.

And if I were to go nine years out to 2024, I am adding about 19,000 to about 25,000, and I am at around 44,000.

I see how there is a shift from one to the other, but it also looks like the total savings are declining even though more of the boilers are shifting to the more efficient product. Why would that be?

MR. WOOD: If you're looking at the achievable -- if you're looking at the --

MR. NEME: Incremental achievable.

MR. WOOD: If you look at the cumulative achievable, obviously they build up.

MR. NEME: Right, but the incremental achievable on turnover --

MR. WOOD: But the economical achievable would just reflect that there is a decline in the stock over time as those boilers are replaced.

MR. NEME: Right. But the amount that is turning over every year is roughly the same, is it not?

MR. WOOD: It would be, yes, it would be 1/25th of the remaining stock.

MR. NEME: Right. So if the amount that’s turning over, if 1/25th of the remaining stock is the same every year, why would the savings decline as more of the savings -- as more of the turnover is being converted to the higher efficiency unit?

Shouldn't it actually go up?

MR. WOOD: Because the stock itself would be declining over time.

MR. NEME: But that's irrelevant, if the turnover is the same amount every year, isn't it?

MR. WOOD: Well, sorry, there would be fewer -- there would be fewer boilers over time.

The boiler that was installed would still be replaced 25 years later, but the stock of those boilers would decline over time.

MR. NEME: Yes, but the -- I'm sorry, but I am trying to understand this.

Let's say there is 1,000 boilers out there and that is the stock, and each year 40 of them are being replaced because there is a 25 year life --

MR. WOOD: Yeah, sorry, I think the -- I can get back to you. If you want, I can get back to you with a bit more of an explanation. But the model recognizes the age of the stock.

MR. NEME: So the model is, in essence, assuming two and a half percent of the stock turns over every year. But it is subtracting from the stock however much turned over the previous years?

MR. WOOD: Yes, yes. So the stock --

MR. NEME: Isn't that double counting, or double eliminating potential?

MR. WOOD: No. I mean, the same as if you're looking at household furnaces, there are no -- over the period, you're not installing new furnaces that are the old standard.

MR. NEME: Understood.

MR. WOOD: Right.

MR. NEME: But the ones that turned over in year one were not candidates to turn over in year 8. So the ones that are candidates to turn over in year 8 are still the old ones, they aren't declining.

MR. WOOD: So if you want, as I say, I can come back to you with a more detailed explanation of that, of why that is, but --

MR. NEME: All right. That would be great. So one other follow-up question, just so we understand this because I wanted to get back to your point about some of these measures competing with each other.

MR. WOOD: Yes.

MR. NEME: From looking at this table, how do I know which ones are competing with each other?

MR. WOOD: In if you look at column G in the spreadsheets, it tells you those which are members of a competition group, and those which are in the same competition group with the same name are competing with each other.

MR. NEME: Competing with each other; okay, great, thank you.

MR. WOOD: Thank you.

MR. NEME: If you could follow up and explain better why the stock turnover would lead to shrinking numbers of units turning over each year, that would be helpful.

MR. WOOD: Okay.

MR. POCH: Can we get an undertaking number for that?

MR. MILLAR: Yes, I think we're now at JT1.22.

UNDERTAKING NO. JT1.22: ENBRIDGE TO explain better why the stock turnover would lead to shrinking numbers of units turning over each year

MR. NEME: Thanks, Glen.

MR. POCH: Mr. Neme, unless I am wrong that is all of the questions that I needed you to ask; correct?

MR. NEME: Correct.

MR. POCH: Okay great. I think I have about a half dozen or so left that Mr. Chernick is involved in, and maybe we could just turn to those quickly now. Mr. Chernick, are you there?

MR. CHERNICK: I am. Are we on question --

MR. POCH: Question 49, so this is back to topic 9, GEC number 49, at the PDF page 632, I think.

And in parts (a) and (b) we asked for the -- basically, the data and instructions you provided Navigant with for your distribution of avoided costs study and any memoranda, draft reports, or presentations they provided to you.

The response is that this would be, you know, I take it you feel this is too onerous, given where it is in the hearing.

I just want to clarify, what we're asking for is just communications that have some substance. We don't need all your e-mails trying to set meeting dates. But one assumes that there were memos with instructions or memoranda recording what went on in meetings.

Can we get that, please?

MS. OLIVER-GLASFORD: I think the meaningful piece, in terms of the instructions provided to Enbridge, are summarized as stated in the background and objectives. Beyond that, I am not aware of any communications, and unfortunately two people on my team that were involved with this are not with us right at this particular time.

So I can seek to look more, but --

MR. POCH: Well, I would suggest that you could simply ask Navigant for that then. They would have probably a more concise file, in fact.

MS. OLIVER-GLASFORD: Okay.

MR. POCH: Can we do it that way?

MS. OLIVER-GLASFORD: Sure.

MR. POCH: Thank you.

MR. O'LEARY: Well, Mr. Poch, it is going to be subject to best efforts and reasonableness, and so it will not be all of the communications between the company and Navigant. It will be simply, as you've described, something that is of relevance.

MR. POCH: Well, of substance, yes. Appreciate that.

MR. MILLAR: JT1.23.

UNDERTAKING NO. JT1.23: TO PROVIDE COMMUNICATIONS of relevance BETWEEN THE COMPANY AND NAVIGANT

MR. POCH: Okay. And, sorry, one sec. Question 50 in that series.

MR. CHERNICK: David, do you want me to --

MR. POCH: Yes, go ahead, Paul.

MR. CHERNICK: Basically, in the Navigant report on the avoided distribution costs, there are some inputs provided, the expenditures by year and the assumed annual load growth, and then another -- you know, there are a few other numbers thrown in there for, I think maybe inflation rates and discount rate and so on.

But there isn't anything that shows how it went from the capital cost to the annual cost, what depreciation period was used, what was done in real terms, what was done in nominal terms.

Basically, there is this big gap between some of the inputs and outputs. So, you know, we don't know how much peak load per cubic metre of annual sales was assumed for each of the load shapes. We don't know what period was applied for annualizing the costs. There is something about assuming an 18-year delay in the installation, and there is some kind of present-valuing going on over some period of time. It would be just nice to have that spreadsheet that did that calculation, like a simple thing for Navigant to supply.

MS. OLIVER-GLASFORD: So we will seek to do an undertaking on substantive inputs for assumptions.

MR. POCH: And I think what you're hearing, Mr. Chernick, say, is if you just give him the spreadsheet with the formula live and the link sheets or whatever, then he can figure it out. But that might be the simplest and easiest thing for you to do.

MS. OLIVER-GLASFORD: That --

MR. CHERNICK: It would also answer all the questions about how you got from one place to another. Just having the starting point and the ending point is not all that useful.

MR. O'LEARY: Well, we've indicated that we will provide the substantive inputs. Providing the model, as you know, creates difficulty in several respects. The first is, to the extent that then there is another run that's made of the model and it generates some different results, it becomes very difficult, if not impossible, for other parties and the Board to understand exactly what's been done, and you often then spend a great deal of time trying to simply recreate what steps were undertaken to generate the different results. I'm not exactly sure what you're intending on doing with the model, but that is one concern.

Secondly, as I come back to my earlier point, I just believe it is beyond the expectation of the Board in this proceeding that we get down into matters of this nature and this detail for the purposes of this DSM proceeding. So I just don't believe it is an appropriate production.

MR. CHERNICK: Because this avoided T&D methodology was approved by the Board previously?

MR. O'LEARY: Well, there was a custom IR proceeding that took place at some length and expense -- not that long ago -- in which case the company's system gas forecasts were approved by the Board, and we have referred you back to that particular proceeding and earlier ones, and we stand by those as being the appropriate inputs for this proceeding.

MR. CHERNICK: I was asking about the avoided T&D costs. Are you saying that this T&D methodology, what Navigant did was implementing a methodology that had been presented and detailed to the Board and approved?

MR. POCH: It is not our understanding. I think, Mr. O'Leary, you were referring to the commodity there a moment ago.

MR. O'LEARY: Yes.

MR. POCH: We're concerned about T&D in particular.

MS. OLIVER-GLASFORD: I think Enbridge made best efforts to proactively address this issue to be responsive to the Board's request and to the framework as we read it.

So certainly we provided additional material on top of even what might have been expected and found an output which is largely consistent with what I understand in past research.

So I think, while it is not necessarily approved methodology yet, this particular study, it certainly is a best effort to address this topic in a way that is directionally helpful for the preparation of the DSM plan.

MR. POCH: That's all appreciated. I guess just to help Mr. O'Leary with this -- and I have referred to this earlier -- when you have -- a primary concern in this case, it seems to me, is this impact on non-participants, rate impact. The T&D costs impact or benefit, if you reduce them, non-participants. And because your measure costs, your program costs, which is what your primary -- you have identified as the Board has focused on in terms of rate impacts -- might be small compared to the total TRC of a measure, because the customers are paying for the lion's share of it, even a small change in T&D costs that we might suggest or find appropriate can have a dramatic impact on what the rate impact for non-participants is.

So we think it is squarely within the -- this hearing. It's -- in fact, we think it is an essential issue in this hearing, and that is why we would like to have access to that information.

So I would ask -- I would ask the company to reconsider whether it can provide that level of detail.

MR. O'LEARY: I think our answer as put stands.

MR. POCH: All right. Then we will have to consider whether we will bring a motion, thank you.

MR. CHERNICK: Moving on to 50 -- oh, in 52(c), your explanation said that part of [audio dropout] GTA was considered a distribution project and transmission project, and perhaps you provided it someplace else and I just didn't see it.

But did you provide the calculation of the -- between [audio dropout] transmission and distribution? Or could you do that?

MS. OLIVER-GLASFORD: Sorry, what exactly are you looking for beyond the breakdown that is provided there?

MR. CHERNICK: How did you get it? Was it certain amount of capacity in certain lines? Was it the incremental cost of serving your load on top of the merchant load? Was it the incremental cost of serving the merchant load on top of your load? And so on.

MR. POCH: This is in 52 we're looking at?

MR. CHERNICK: 52 (c), yes.

MS. OLIVER-GLASFORD: I will have to seek to undertake that on best efforts, that that information exists.

MR. MILLAR: JT1.23.

UNDERTAKING NO. JT1.23: enbridge to make best efforts to provide more information about the breakdown between transmission and distribution

MR. MILLAR: It may be helpful to have some precision in the question.

MR. CHERNICK: You have a number; how did you get that number?

MR. POCH: How was the percent allocation made between the merchant transmission and distribution? Is that the --

MR. O'LEARY: You're referring to the 60/40 in the response to C?

MR. CHERNICK: Right.

MS. OLIVER-GLASFORD: Okay, clarification is helpful and on that basis, I will do an undertaking.

MR. MILLAR: So that is 1.23 -- sorry, my mistake, JT1.24.

UNDERTAKING NO. JT1.24:  percent allocation made between the merchant transmission and distribution

MR. CHERNICK: So in 53 and 54, we just are looking for the rest of the mains expenditures to match up with the -- what you consider to be load-related, so that we could compare that to other similarly-growing gas utilities, so that we can determine whether the categories are very small and they're not even worth pursuing, or whether they're very large and a small part of them actually being related to the load level would be significant.

And 53 and 54 ask for data that I am sure your engineering department turns out on a regular basis. It's a very simple thing to provide.

MS. OLIVER-GLASFORD: Can I ask you to clarify your question, Mr. Chernick?

MR. CHERNICK: Yes. We asked for expenditures for the other categories of mains, for the period --

MR. POCH: That's other than reinforcement?

MR. CHERNICK: The other categories of mains which you deemed to be not load-related, but what were those expenditures, the amounts of line that were added or replaced in those categories?

MS. OLIVER-GLASFORD: So --

MR. CHERNICK: This is the sort of thing that most utilities -- in an annual report, that is very easy to provide. I don't really expect you to do much extra work to get it.

MS. OLIVER-GLASFORD: So to respond to your question, Mr. Chernick, as I understand it, we will seek to do an undertaking on best efforts.

However, just as a point of note, it is only the reinforcement mains which are relevant to an avoided transmission, avoided cost component.

When we look at some of the other types of mains, replacement mains or sales mains, as I understand it, they are not within the scope of what can be reasonably deferred.

MR. CHERNICK: And that's something that we can talk about in another forum. But it doesn't seem to be worth our time right now to talk about it with everybody else in the room.

The way that you approach things may not be the way that everybody approaches the same questions.

MR. POCH: That's fine. We have an undertaking, so let's move on.

MR. CHERNICK: Number 55; this is another request just to double-check your allocations, just ask for your capital budget in the form that you routinely provide them. You provided some years, but not other years.

I would like those to be able to compare them to the values you used, or that Navigant used.

MR. POCH: Let me interrupt and ask Board Staff: Did we get a number for that undertaking which pertained to our numbers 53 and 54?

MR. MILLAR: No, I don't think so. So it is JT1.25.

UNDERTAKING NO. JT1.25: ENBRIDGE TO PROVIDE A RESPONSE TO GEC IR 53 and 54

MR. POCH: Thank you.

MR. CHERNICK: I guess the same question; can we get an undertaking for number 55, the capital budgets for 2008 to 2012?

MR. LISTER: I was just going to ask for that clarification. And yes, we will provide an undertaking.

MR. MILLAR: So that will be JT1.26.

UNDERTAKING NO. JT1.26: ENBRIDGE TO PROVIDE A RESPONSE TO GEC IR 55, the capital budgets for 2008 to 2012

MR. POCH: Thank you.

MR. CHERNICK: On question 56 (a), in attachment 1, as you go several pages in, there are projects --

MR. LISTER: May I just clarify the taking of the undertaking?

I want to be clear. There were no Board-approved 2008-2012 capital budgets. Those were years we were in an incentive regulation plan.

MR. CHERNICK: Did the company produce capital budgets in those years?

MR. LISTER: They were not Board-approved capital budgets. Of course, there was capital spend.

MR. CHERNICK: Well, if you've got internal budgets for those years and can provide them easily, fine. If you just have spending by the categories laid out in the standard report in the partial response you provided, that would be fine.

We're not trying to be picky here, believe it or not.

[Witness panel confers]

MR. O'LEARY: I am struggling with, first of all, whether or not the company can even respond to that, because it did not develop a rigorous budget that was going to be reviewed by parties and the Board in these years.

Obviously, as Mr. Lister has said, there was an actual capital expenditure in those years, and perhaps there could be a breakdown as to that. That was part of the earnings sharing mechanism, so that could be reproduced and referenced in an undertaking.

MR. LISTER: Yes, we will provide that.

MR. CHERNICK: In question 56, this is a very simple clarification. It may not be simple to answer on the spot, but in attachment 1, in the cost column as you go in several pages -- I think about page 7 or 8 -- you start to hit situations in which projects have a symbol N/A instead of a cost in the cost column.

We were wondering, does that mean there is no estimate yet for the cost of those projects, or it is not applicable because somebody else has got paid for it? Or does it mean something else?

We would just like a clarification on that point. That is probably an undertaking, given the people probably sitting there didn't produce this response.

MS. OLIVER-GLASFORD: We will seek to do an undertaking on that.

MR. POCH: Thank you.

MR. MILLAR: So that is a fresh undertaking, JT1.27.

UNDERTAKING NO. JT1.27: ENBRIDGE TO PROVIDE A RESPONSE TO GEC IR 56

MR. POCH: Are you there, Paul?

MR. CHERNICK: Yes. Another clarification is that -- oh, okay. The response to part (c) indicated that there was an error in the data given to Navigant, in terms of the reinforcement expenditures.

Can Enbridge follow up with an explanation of what was left out, and how many dollars were involved?

MS. OLIVER-GLASFORD: Yes, we will seek to do an undertaking to provide that.

MR. GLUCK: That will be JT1.28.

UNDERTAKING NO. JT1.28: ENBRIDGE TO CLARIFY THE response to part (c), indicatING that there was an error in the data given to Navigant, in terms of the reinforcement expenditures

MR. CHERNICK: Section (d), which may potentially be answered depending on how you respond in your follow-up to 52 (c). But in part 56 (d), you indicated that the Ottawa reinforcement and GTA reinforcement projects were considered to be reinforcement, and associated with load growth and that some parts were due to something else.

I would like to know what the breakdown was and the basis for that.

MS. OLIVER-GLASFORD: Yes, we will provide an undertaking for that.

MR. MILLAR: That's JT1.29.

UNDERTAKING NO. JT1.29: TO PROVIDE THE BREAKDOWN AND BASIS FOR the reinforcement projects in ottawa and the gta.

MR. POCH: Just one or two left, I think. Is 57 already covered with -- is it the same error we're speaking of here, Paul, the Navigant --

MR. CHERNICK: I believe it is the same error that --

MR. POCH: Can we just get that confirmed, that the mixup with Navigant is the same one we spoke of a minute ago?

MS. OLIVER-GLASFORD: The error mentioned on GEC 57 is, in fact, the same as the 56. So, yes.

MR. POCH: Okay. Great. So you are already going to give us some information on that.

MS. OLIVER-GLASFORD: Correct.

MR. CHERNICK: The last thing we had was on question 59 of -- this had to do with getting the derivation of the peak day demand distribution avoided costs in dollars per thousand cubic metres of annual peak day demand from the annual costs.

We asked questions back in -- questions 49 and 50, and I think you offered to try -- to ask Navigant to provide an undertaking on that. That would also take care of

number --

MR. POCH: Okay. So we don't have anything further on that. I think that is all of GEC's questions.

MR. MILLAR: Thank you very much, Mr. Poch and your assistants.

MR. POCH: Thanks, everyone, for their assistance.

MR. MILLAR: Mr. Quinn, did you want to go next?

MR. QUINN: Yes. Yes, thank you, Mr. Millar.

# Questions by Mr. Quinn:

Good afternoon, panel. Hopefully -- I am going to actually go in a different order. I'm going to stick with the avoided-costs theme, since it is fresh in our minds and hopefully will be helpful to all parties in what I may ask.

We too were asking questions about avoided costs, and it emanated from FRPO 4, which I don't know that you really need to turn up, because we were referred to the same piece of evidence that GEC was referred to, and that was the Enbridge evidence in EB-2012-0394. Thank you, Bonnie.

So I am going to just ask questions from this vantage point. I understand that undertakings may be required to get clarity, but my first and most simple question would be, on page 2 of that document -- and for hopefully Mr. O'Leary's benefit I am going to separate methodology from input.

I understand this is the methodology. We referred to this document because this was the methodology in that proceeding, and that methodology continues to this day. Is that Enbridge's understanding?

MS. OLIVER-GLASFORD: The date on this one, yes, it is my understanding that the methodology is consistent.

MR. QUINN: Great, thank you. So in paragraph 5, as you see on the screen, there is a methodology that talks about separating annual NYMEX prices and seasonal adjustment factors were developed and applied to future base differentials, which is -- and I don't want to speak to our friends from GEC, their questions, but can you tell us the vintage of the forecast that was used for the evidence that the company has applied for in this proceeding?

In other words, what was the date on the NYMEX forecast that was used? If you could help us with that, to know is it a current date or are you still referring to the 2012 data?

MS. OLIVER-GLASFORD: I will seek to do an undertaking on that particular...

MR. MILLAR: So JT1.30.

UNDERTAKING NO. JT1.30: TO PROVIDE THE DATE ON THE NYMEX FORECAST THAT WAS USED.

MR. QUINN: I was hoping it would be easier than that, but maybe if I ask the question this way. There had to be data that was provided to Navigant for them to do a review. There had to be analysis that was done to provide that to Navigant.

Was that analysis done very recently? Or did they review the 2012 analysis? Including the inputs from 2012?

MS. OLIVER-GLASFORD: Subject to check, I believe we used 2013, but I will check on that, Mr. Quinn.

MR. QUINN: Okay, thank you. Maybe it is not going to be as short as I had hoped. But I guess what I'm trying to get to is, there have been some significant structural changes in the way Enbridge is sourcing gas, and those have impact on both your commodity and your transport prices.

You would agree with me in that area?

MS. OLIVER-GLASFORD: Yes, yes, we would.

MR. QUINN: Okay. So you're sourcing gas closer to your franchise, not the traditional source of Empress and Alberta. Your portfolio has changed significantly over this last few years.

And I guess what we would be seeking is, can Enbridge provide the date of the analysis, and if the date of the analysis is not consistent with its current outlook, that you can either identify if there will be a material difference or rerun it with current price forecasts in place.

And I'm talking about a Q3 price forecast. Whatever your most recently approved price forecast, so it's Q3, 2014, we would be satisfied with that.

[Witness panel confers]

MS. OLIVER-GLASFORD: Clearly I am not a gas supply expert and nobody on this panel is, but we will certainly seek to see whether that can be provided.

MR. QUINN: Okay.

MR. MILLAR: So that is JT1.31.

UNDERTAKING NO. JT1.31: ENBRIDGE TO PROVIDE THE DATE OF THE ANALYSIS, AND IF THE DATE OF THE ANALYSIS IS NOT CONSISTENT WITH ITS CURRENT OUTLOOK, TO EITHER IDENTIFY IF THERE WILL BE A MATERIAL DIFFERENCE OR RERUN IT WITH CURRENT PRICE FORECASTS IN PLACE.

MR. QUINN: Thank you, Mr. Millar.

I am going to provide some clarity hopefully in terms of context that I think will be helpful to our enquiry and potentially others, but what I am trying to make sure is copied -- sorry, captured in this analysis is two main factors. One is the sourcing of gas closer to franchise -- our friends from GEC were asking about the reduction in transportation costs going over the next five years. That is clearly a result of your transportation costs to your franchise decreasing because you're sourcing gas in Marcellus and not out west.

I believe that as long as that factor is taken into account, my hope and belief is there is not a material change between what is going on in 2014 versus 2015, and that may overcome some issues.

The other part is -- and I have to refer to your response to us, and this is where I will if to FRPO 4. And -- no, it's not in that. Actually, it may be back on -- when I reread this -- I apologize, Bonnie, if you go back to the 2012-0394.

My concern -- and this will have to have the gas supply folks involved with it. And I can't even pull up the exact reference. But it was -- the evidence was done in the multi-point winter forecast. That is your evidence, and I will find a reference for you if it is helpful, and I will give it to you at the break. But your evidence is stating that Enbridge continues to use the multi-point winter seasonal forecast, and you can -- for the benefit of your gas supply folks, they can provide hopefully some background with their answer.

But Enbridge over this last year, in the 2015 evidence, basically went on the record to state that you are varied from that approach to your winter and you are modelling more towards a storage-target forecast. And I'm not sure if Mr. Culbert or somebody can acknowledge that, or if Mr. Lister can.

MR. LISTER: Perhaps as part of the previous undertaking we can address that, and of course we're going to have to ask the gas supply people to provide that for us.

MR. QUINN: Okay, thank you, Mr. Lister, if you could do that. What I want to do is, for the benefit of the Board, is to make sure that your forward forecast takes into account material changes in how you procure and you plan for your gas supply during the winter, because that will have an impact on a lot of assumptions of avoided cost. So I would ask Enbridge on a best-efforts basis to work that in with their gas supply folks.

And then with that, you might choose to do an updated forecast using SENDOUT or, if it has already been taken into account, put that on the record, because that's very important, that for the next six years we're actually using what Enbridge does today, not what they did in 2012.

MR. LISTER: Understood. We will make sure that is addressed in the undertaking.

MR. QUINN: Okay, thank you, Mr. Lister.

Just one final point on that, and I think it may be part of the GEC undertakings, but if -- no, I will go forward instead of going back to the GEC undertakings.

If there is a revision of the forecast, if the company could consider whether Navigant takes a look at the updated forecast and renders its opinion to that forecast? Because right now, what we have on the record is Navigant’s review of what you have done to this point and are satisfied with that.

My concern is that it may be a significantly different forecast in front of the Board when it comes to the time of hearing.

So as opposed to having that question be asked at the hearing, we could have it asked at the technical conference and that would aid the Board, I think, at that point.

[Witness panel confers]

MR. O'LEARY: Mr. Quinn, if I could respond to that?

MR. QUINN: Sure.

MR. O'LEARY: I think whether or not an undertaking is given to approach Navigant will depend upon the results of the company, and certainly we will take it under consideration.

But to give an undertaking, I don't think at this stage to approach our experts is necessarily appropriate. But we will certainly reasonably consider it.

MR. QUINN: That is all I'm asking for is due consideration. Thank you, Mr. O'Leary. I was just trying to expedite the process and hopefully help us at the hearing.

With that, I think our friends from GEC touched on more of the detailed concerns that I had, so I am not going to wade in any further in that area.

I wanted it turn to the other area that we wanted to ask about, and that's the low-income DSM that Enbridge is -- I am stalling because I am trying to get back to my IRs, here we go.

So if we could turn up Exhibit T2, Enbridge-FRPO 1. Since Ms. Lontoc hasn't been able to join the panel, and she has a lot of the detail, I’m not sure who to ask these questions to. But anyone can take a shot at this.

In the table, you have produced the differentiation between social assisted housing and private rental for low-income for the past three years, and we thank you for that response.

With that background, if you would just turn to FRPO 2, it was actually referred to earlier. And the Enbridge panel referred to what they called retrofit fatigue that was part of the concern that we experienced in that table that shows a reduction in the amount of cubic metres saved in the social housing sector.

So with those two together, I guess, I want to ask just a couple of questions in that regard.

So if we could turn back to the table in FRPO 1, would you agree with me that given where you're at at this juncture, the private rental sector has a greater potential for Enbridge moving forward?

MR. PARIS: Sorry, in comparison to the social housing or just --

MR. QUINN: Yes. In comparison to social housing.

MR. PARIS: It definitely has taken on greater importance for us, yes.

MR. QUINN: Okay. And I want to say this respectfully, because I understand Board Staff have some questions and they have not been as involved in some of the low-income consultatives that Enbridge has put on, which we appreciate.

But if I ask the question this way: If the Board were to require Enbridge to have low-income benefits only go to those customers who directly pay their bill, would Enbridge be able to forecast what change in their targets they would produce for the 2016-2020 period?

What I am trying to get at, Mr. Lister -- and I think you understand this -- is that in our view, there is an opportunity for private rental. If that was removed because of limitations we’ve talked about through the consultatives, and with folks like Mr. Neme from GEC and other low-income groups, we've recognized that the private rental market, because of the differentiation in metering that not many end use customers pay their bill in the private rental sector.

So if the Board required that the low-income benefits could only go to those customers who are paying their bill directly, would Enbridge be able to give a hypothetical forecast as to what cubic metres they believe could be saved in the part 3, low-income multi-residential sector?

MR. LISTER: I was going to start my response with that would be a very difficult undertaking to provide.

Certainly I was going to address the point that our observation is that so many of the residents who live within the low-income eligibility or parameters are not separately metered, that it would effectively -- I can say for certain that it would effectively seriously diminish that target, and our ability to serve that market.

That, I think we could say unequivocally. Our ability to estimate the size of that market, I'm a little less certain of.

MR. QUINN: I didn't want to go through too much detail, because you have answered some of our other enquiries in the next interrogatory.

In FRPO 3 I asked about percentages, and you have given us what percentage of private low-income billing participated in an Enbridge incentive program, which is not necessarily a low-income program.

I am reading that correctly, am I?

MR. PARIS: Yes, correct.

MR. QUINN: Okay, so it is just a general Enbridge incentive program.

What I am trying to drill down to, Mr. Lister -- and I'm saying a hypothetical forecast plus or minus 10 percent -- what percentage reduction would Enbridge forecast if it were not able to provide part 3 low income to the private sector because the customers aren't paying their bill directly.

[Witness panel confers]

MR. LISTER: As you correctly pointed out at the beginning, Ms. Lontoc is not on the stand with us, and she is certainly the foremost expert on this. Why don't we take that away and converse with her, and if we can provide it, we will.

MR. QUINN: Just on a best efforts basis, and put a range of contingency or tolerance around that. I’m okay with that.

But I believe the number would be significant, but it’s a bigger-than-a-breadbox that we don't even have on the record, so that is what I'm trying to get to.

MR. LISTER: Will do.

MR. MILLAR: JT1.32.

UNDERTAKING NO. JT1.32: ENBRIDGE TO PROVIDE a hypothetical forecast of percentage reduction, plus or minus 10 percent, it WILL BE ABLE TO PROVIDE if it were not able to provide part 3 low income to the private sector because the customers aren't paying their bill directly

MR. QUINN: I'm not sure I caught us up back on schedule, but those are my questions, thank you.

MR. MILLAR: Thank you, Mr. Quinn. Is there a volunteer to go next? Mr. Elson?

# Questions by Mr. Elson:

MR. ELSON: Good morning. I have met some of you before, but others not. My name is Kent Elson, and I'm representing Environmental Defence.

I believe I will also be speeding up the schedule a little bit today.

I had a brief discussion with Mr. O'Leary and my understanding is that you will be able to provide undertakings to answer the eight questions that we provided to you on July 2nd, 2015.

Mr. O'Leary, is that correct?

MR. O'LEARY: That's right.

MR. MILLAR: So should we identify that?

MR. ELSON: As one undertaking, I think would be sufficient.

MR. MILLAR: Okay. So that is 1.33.

UNDERTAKING NO. JT1.33: ENBRIDGE TO PROVIDE ANSWERS TO THE QUESTIONS POSTED BY ENVIRONMENTAL DEFENCE on JULY 2nd, 2015

MR. ELSON: And I can also further speed things up by converting some of the questions that I was going to ask orally into a letter that I will send to Mr. O'Leary later on today or tomorrow.

And if you could make best efforts to answer those questions, that could help move things along faster.

MR. O'LEARY: I'm hesitant to say anything other than we hope it would be a limited number of questions.

MR. ELSON: It will be three.

MR. O'LEARY: Three? As long as they don't have parts 1 through 21 with each attached --

MR. ELSON: They won't. Perhaps that could be a separate undertaking number?

MR. MILLAR: That is JT1.34, and that is to respond to questions you will provide in writing shortly to the company.

UNDERTAKING NO. JT1.34: ENBRIDGE to respond to questions ENVIRONMENTAL DEFENCE will provide in writing shortly

MR. ELSON: Thank you. Of course, if there is any questions or clarifications that you have on receiving those questions, if you could get in touch with me, that would be appreciated.

MR. O'LEARY: Thank you.

MR. ELSON: So I believe that leaves just one area that I wanted to ask you about, and the reason I want to ask you orally is that I am hoping to get just some, you know, a general understanding of this area, rather than to get into specifics.

If you could turn to tab 3 and Environmental Defence interrogatory 14, you will see there is a reference in this interrogatory to page 15 of the DSM framework, and as context I will read that quote there.

It says:

"Many elements of DSM programs that offer the greatest opportunity to realize long-term natural gas savings (and bill reductions) are related to the installation of energy efficient products, such as a furnace or insulation. The opportunity to install one of these more significant items will not be present for the majority of customers in the gas utilities' service territories."

I would like to delve a little bit deeper into that idea with you. Perhaps I can start by referring to the example that is given in that paragraph, which would be a furnace replacement or the addition of insulation.

Can you provide some examples of why a residential customer would not qualify for a program related to one of those two items?

MR. LISTER: I'm not sure I have the context for the rest of the quote, but what you read us there is indeed from the framework, and I might suggest that at the very least, or at least what I take away from this sentence, is that not all customers would be ready to implement a furnace or insulation replacement; that's not to say that they couldn't or wouldn't in the future, but within a limited term of five years and much longer useful lives for those products, they simply won't reach their -- a stage where the customer might wish to replace those elements.

MR. ELSON: So the issue would be that replacing a furnace wouldn't be cost-effective or reasonable if it hasn't reached the end of its useful life?

[Witness panel confers]

MR. LISTER: I think more broadly, the issue may be that the customer already has a high-efficient product, or it has a long useful life ahead of it, or if they've just purchased it. There could be many, many factors that contribute to that.

But I think the essence of the point is that it is a five-year window within which we're looking, and the ability to capture every single customer won't be present within five years.

MR. ELSON: And that's what I would like to narrow down on in particular. My understanding is that within a smaller window there will be a greater number of customers who won't have the opportunity to participate in your programs; is that right?

MR. LISTER: I think that's a fair assessment, generally, to say that a shorter framework will necessarily mean that fewer customers would participate in DSM in general, but that does not mean that there wouldn't be a subsequent framework of, say, another five years where those customers that didn't participate in the first window could participate in the second.

MR. ELSON: And how long has Enbridge been running its DSM programs?

MR. LISTER: To my knowledge, since at least 1995.

MR. ELSON: So if you were to expand what you're looking at to a 20-year window, would you think that almost all of Enbridge customers would have had the opportunity to participate in DSM programs related to some of those bigger-ticket items, such as furnace replacement or insulation?

[Witness panel confers]

MR. LISTER: I think generically, I think it is enough to say that over a 20-year period there's been opportunity for many customers to participate in DSM programs. I think you will appreciate that in 1995 we were a much smaller utility. We've grown significantly in the last 20 years.

Equipment and technology have changed drastically. Our DSM programs, pricing of gas, there have been almost too numerous to list variables that have changed over time, but I think generically we would agree with the statement that over a long period of time many customers have had the opportunity to involve themselves in DSM programs.

MR. ELSON: And I guess the questions that I have been posing were related to two examples, which was replacement of a furnace or addition of insulation, but if you were to include the wide range of programs, I mean, I would imagine that at some point or another, perhaps not within five years, but within a wider time frame, most of your customers would have an opportunity to participate in one of your programs.

MR. LISTER: I think generically, again, I will say that the longer the time period, the more customers could participate.

MR. ELSON: I guess what I'm looking for is something a bit more specific than that. I mean, it seems to me -- and I know that I asked this same question to Union and they were able to say that all of their customers have had an opportunity to participate in their programs.

And I would appreciate if you could maybe take this away and give it a little bit more thought, if you could put some more precise figure to how many of your customers have been able to participate in your programs at one point or another.

MS. OLIVER-GLASFORD: And I was going to, actually --

MR. ELSON: Okay, thank you.

MS. OLIVER-GLASFORD: -- just add a little bit to that, because I very much agree with Mr. Lister's comments, but would broaden it, because I think you're specifically asking about those larger measures, have they had an opportunity to do those.

So not necessarily, but certainly we've offered the programs broadly across our franchise area, and when we start to add-in other measures, other programs from the past, such as the Enbridge TAPS program, certainly all of our customers would have had an opportunity to participate in DSM programs at the residential level.

MR. ELSON: Thank you. I don't have any other questions, except the ones that I will be sending you in writing.

MR. MILLAR: Thank you, Mr. Elson.

Any volunteers to go next?

MR. DeROSE: It is Vince DeRose. I am down to about three questions. If you don't mind, could I proceed?

MR. MILLAR: No. Go ahead, Vince.

# Questions by Mr. DeRose:

MR. DeROSE: So thank you, panel.

First of all, I have a question with respect to CME 4.

MR. LISTER: Mr. DeRose, do you mind providing the tab number?

MR. DeROSE: Yes. It is Exhibit I.T11.EGDI.CME.4.

MS. OLIVER-GLASFORD: Yes, we're there.

MR. DeROSE: And in -- the quote that you have given us addresses the attribution of savings when you're working in coordination with other rate-regulated utilities.

Could you provide clarity on how you attribute savings when you are cooperating or working with non-rate-regulated entities?

So for instance, earlier today you talked about with NRCan, for example, and I realize the funding didn't come through on the LIC project, the LIC residential project with NRCan, but by way of example, NRCan is not a rate-regulated utility.

How do you deal with the attribution of savings in those situations?

[Witness panel confers]

MR. LISTER: Just one moment, Mr. DeRose, we're just searching through our record here.

MS. OLIVER-GLASFORD: Mr. DeRose, the attribution of benefits between rate-regulated natural gas utilities and other parties is outlined in the filing guidelines to the 2015 to 2020 DSM framework under section 7.2.2, attribution, and that is page 22.

MR. DeROSE: Okay, thank you. Then if I could take you to CME 2. Mr. Janigan asked you some questions about this this morning, and I just want to clarify to make sure I understand this.

MS. OLIVER-GLASFORD: Mm-hmm.

MR. DeROSE: And I realize you do have footnotes where you try and explain the difference between the cost of DSM in rates and the cost of DSM to participants. But I am hoping that you can explain that a little bit further to me, because I was having trouble understanding the difference between -- so you have 353 million, which is the cost of DSM in rates. And then you have just over a billion dollars in the cost of DSM to participants.

[Witness panel confers]

MR. DeROSE: Sorry, do you have that?

MS. OLIVER-GLASFORD: Yes, yes, we do.

MR. DeROSE: Can you explain what costs are captured in each of those two categories?

MS. OLIVER-GLASFORD: So as it outlines in number 1, it's the impacts of LRAM, SSM, DSMIDA, and DSM spending.

The costs are the millions outlined under total cost of DSM to participants, would also include those costs that are borne by the participant, which are the incremental costs of those technologies that are the more efficient technologies.

MR. DeROSE: The 1.082 billion are the -- that is the costs of -- by way of example, if it is a custom project and you go in and you do a boiler, it is the incremental cost of the boiler to that participant?

MS. OLIVER-GLASFORD: Yes, the difference between what would be considered the base case and the energy efficient option.

MR. DeROSE: Okay. And so the line item of total cost of DSM participants, none of those costs have been recovered through any type of rates, or recovered in any way by Enbridge?

MS. OLIVER-GLASFORD: That is correct.

MR. DeROSE: So in terms of the pure -- what ratepayers have paid directly to Enbridge is 353 million?

MS. OLIVER-GLASFORD: Yes, that would be the amount that would be in rates.

MR. DeROSE: Okay. Thank you very much for that.

And then if I can take you -- probably the best place to deal with this is Staff 8.

MS. OLIVER-GLASFORD: Okay, we're ready.

MR. DeROSE: And again, I know that you talked this morning about the TAF mechanism, and I think you explained clearly what would happen if there's a new input assumption.

Does the TAF also address situations where one of your programs -- and not because of input assumptions, but just because of unforeseen circumstances with your program -- whether you either materially exceed the scorecard performance metrics or materially under-perform, does the TAF address that situation?

MR. OTT: No. The TAF has not been designed to address that situation.

MR. DeROSE: Okay. And so if you set your scorecard metrics today, and three years from now you are either materially under-performing or materially over-performing for reasons that are separate and apart -- these are not input assumption information, this is just you didn't foresee something to happen -- is the target adjusted at all? Or is there a mechanism to adjust the performance metric, the targets?

[Witness panel confers]

MR. OTT: Thank you for your patience, Mr. DeRose. So from our perspective, certainly the TAF has not been proposed as a mechanism to address any such discrepancy.

From our view, the Board has given us direction that it is appropriate for a mid-term review to take place at the halfway point in our DSM multi-year plan. And should targets or budgets at that time -- well, they will be reconsidered as part of that review. And if they're not appropriate, then presumably they would be adjusted accordingly.

MR. DeROSE: Okay. Other than the mid-year review -- and I guess really, just so you understand where I'm getting at here, I am just trying to understand the importance of getting the targets right.

So if, for instance, if you're -- we will use the example that you have used at page 7 of 7. If the original current year target is 1000, and in year 1 you achieve 100, there's nothing that you can do about that until the mid- year review?

[Witness panel confers]

MR. OTT: That is correct.

MR. DeROSE: And conversely, if -- and really I guess what I'm getting at is if we or the Board collectively set the targets wrong, I am trying to understand what the consequences would be.

If the target is too low and the original target is 1,000 and you start achieving, let's say, 5,000 because it is easier than anyone thought, again other than the mid- year review, there is nothing that any party could do about that?

MR. LISTER: I would say that's accurate, Mr. DeRose. Ii is, I suppose, a condition of any multi-year plan, and the Board has specifically asked for a multi-year plan.

Presumably the mid-term review is intended to be a pulse check on things like budgets and targets. But it's not our intention -- other than through the TAF and effects on input assumptions -- to adjust any of the targets or budgets, at least before the mid-term review.

MR. DeROSE: Other than the TAF?

MR. LISTER: Other than the TAF.

MR. DeROSE: Okay. Those are all of my questions, thank you very much.

MR. MILLAR: Thank you, Mr. DeRose. Ms. Fraser, did you want to go next?

MS. FRASER: Sure.

# Questions by Ms. Fraser:

MS. FRASER: The reference, of course, will be OSEA 1. In terms of the context, two things really have happened in the last little while.

One is the 15 percent adder for environmental benefits of reducing natural gas consumption, and the other is obviously the Ministerial directive to collaborate with, and therefore end up with a broader range of offerings in the combined DSM-CDM environment.

And, you know, you've done a good job of demonstrating how our basic principles of relative sustainable energy fit in your program to date, and I think -- and some of the things that you have indicated that are required are definitely required, although I am not sure of clarity on policy will help for CHP unless we have a clarity of implementation rules -- but that is another question.

Two other areas that I'm wondering if you considered are solar thermal and ground source heat pumps. Both gas companies undertakings were changed in 2009, and you did proceed with a proposal that would put those sort of things into the regulated -- like not in DSM, but separately.

Have you considered ways of bringing those sort of initiatives into the DSM family of initiatives, particularly given that, you know, certainly the heat pump issue provides combined natural gas and electricity benefits, both in terms of environmental and cost.

[Witness panel confers]

MR. LISTER: Thank you for that moment to confer.

So what we have seen, just as sort of a backdrop, we did do a little bit of -- thank you for your question in advance. We had an opportunity to very quickly ask some technical people if they had some further information, and what we found was that typical payback periods for those technologies are still very, very long.

So with that sort of backdrop, I think the short answer is no, they're not features of our DSM programs.

However, there are some areas where they can be. That is to say, for example, in our savings-by-design program, it is an option that at the customer's election, should they wish to explore heat pumps in some fashion. Then that is one of the measures that they can take to achieve the objective. Whether or not they do is up to them and what their circumstances are, and their choices, and all of that.

Did you want to add anything?

MS. OLIVER-GLASFORD: Sure. And just similarly on the solar side, we have kind of a notional back of the envelope cost benefit where an individual actually has it in their home, so was using that as the reference point from our technical group, and gave us the numbers of $6,000 roughly for an installation, and roughly between 125 to $150 per year for savings. So, you know, you're kind of looking at a 40- to 48-year payback in that respect.

MS. FRASER: But you haven't done any sort of cost/benefit analysis, relative to avoided costs for both gas and electricity combined?

MS. OLIVER-GLASFORD: Not that I am aware of, no.

MS. FRASER: Okay, thank you, that's it.

MS. GIRVAN: I am happy to go next, Mr. Millar.

MR. MILLAR: Oh, I'm sorry. Yes, why don't you do that, because you have got about 20 minutes, Ms. Girvan?

MS. GIRVAN: Yes.

MR. MILLAR: That will probably take us to close to a break, but...

# Questions by Ms. Girvan:

MS. GIRVAN: Sure, okay. Good afternoon, panel. So let me start with CCC -- T3.EGD.CCC.5. So this interrogatory sets out the overhead budget in 2015.

I just wondered if you could help me with a further breakdown. It says it is salaries, training, development, supplies, consulting, sponsorships, memberships. Could you break that down into those categories for me, if possible?

MS. OLIVER-GLASFORD: Yes, we can seek to do an undertaking on that, and just as a point of clarification, we also had an earlier undertaking on this particular IR to provide the percentage from 2016 to 2020 of the --

MS. GIRVAN: Oh, yes, Mr. Janigan. I think that was about overtime, though.

MS. OLIVER-GLASFORD: Yeah. It is a bit different, but I just thought I would...

MS. GIRVAN: Okay. Thank you.

MR. MILLAR: So that is an undertaking, JT1.35.

UNDERTAKING NO. JT1.35: WITH REFERENCE TO CCC IR T3.EGD.CCC.5, TO FURTHER BREAK DOWN THE CATEGORIES.

MS. GIRVAN: All right, thank you. If you could turn to -- let me just see where I should go next. CCC number 3, which is T5.CCC.3. And what we were really looking for is sort of your -- some assessment of your customer engagement with respect to your 2015 to 2020 plan.

I just wanted to confirm, if you go down to the bottom, it talks about your Customer Forum Panel and how the last time you utilized that group was in August 2014.

So can I take from that, in terms of the present plan as designed right now, you didn't go back to your customers and get some input on it?

[Witness panel confers]

MR. PARIS: So thanks for the question. So that meeting in August 2014 would have -- I mean, we were in the process of starting to develop these plans even back then.

I believe shortly thereafter is even when we had one of our first stakeholder sessions with the broader intervenor group, so we --

MS. GIRVAN: This was even prior to the Board's guidelines being published, right?

MR. PARIS: Yes. But it didn't stop us from developing feedback from our stakeholders as to -- we knew that there was a plan coming up.

MS. GIRVAN: All right, thank you.

Could you turn to CCC number -- it is tab 5, number 18, please. And this is regarding the Green Button Initiative, and you've got within the context of your budget for 2015 $300,000 as a part of the Green Button Initiative.

I am just wondering if you can explain to me what is the $300,000 specifically for, because from what I understand there's still working groups with respect to the Green Button Initiative.

MR. PARIS: Yeah. You're correct. So we've really started very preliminary meetings with the working group for Green Button, and the $300,000 was kind of a number that was based on our conversations with those groups as to their experience with the initial phases when they launched this for the LDCs.

MS. GIRVAN: But you don't --

MR. PARIS: Unfortunately I am not able to give you anything specific, concrete, as to what it is, because we've had very -- you know, I believe we've had one meeting thus far with respect to Green Button.

MS. GIRVAN: Okay. So you don't really -- this is just almost like something that is earmarked, but you don't really know what we're going to get for the $300,000?

MR. PARIS: I don't know specifically what the $300,000 will be spent on at this moment.

MS. GIRVAN: Okay, thanks.

So if you could turn to CCC T5, number 29. And I guess -- sorry. This is with respect to NRCan and whether you sought funding from either the federal or provincial government.

It says you haven't -- you're not aware of any interest. But I guess what I would say is, why not ask? Why not ask if they're prepared to supplement your program?

MR. LISTER: I think in a nutshell it is probably safe to say that perhaps we haven't asked over the last couple of years because there's no interest. They shut down their program and essentially got out of that market; yeah.

MS. GIRVAN: Okay. If you could please turn to CME tab 2, number 10. CME 10. So if you pop down to -- scroll down -- and I'm interested in this -- actually, the 2015 DSM budget. So for the residential, the rate 1 class, we have the allocation of 13.2 million for programs, the low-income budget of 4.6, for a total of 17.86 for 2015, million. And if you add in the SSM amount of -- potentially, if you reach your target at 5.25 million.

I'm trying to understand what residential consumers are getting, sort of the scope of what we're getting, in 2015, for these numbers, and I just want to also ask you: Is this all -- or does this include the incremental budget on those specific items that you are asking for and an additional 15 percent? Or does that exclude it?

[Witness panel confers]

MR. OTT: Thank you for your patience, Ms. Girvan. I just wanted to set a bit of context for the derivation of these rate allocations. In preparing our 2015 budget the company was very directly responsive to the Board's direction and section 15.1 of the DSM framework, which called on it to escalate all of its budgets by, to paraphrase, whatever the manner is that the company used to escalate budgets from 2013 to 2014.

In the case of Enbridge, it was determined in EB-2012-0394 by settlement and subsequent Board approval that that would be an escalation value of 2 percent. That at the time was 2011 GDP IPI, which was deemed to be used for subsequent years regardless of what actual inflation turned out to be.

So it was based on those prior filings that the company established its budgets before us today.

In terms of one other area within your question, yes, these values do include the 2015 incremental DSM budget for a total of 37.72 million.

MR. LISTER: And I can just add to the response in terms of your question, Ms. Girvan, about what customers get for that amount of money.

Specifically, the programs that we're delivering in 2015 include the Community Energy Retrofit Program, which is a holistic program that really looks at customers' complete home-energy consumption, provides them audit, provides them information, and the opportunity to significantly and deeply enhance their energy efficiency. It also includes DSM impacts for low-income customers. It also includes new construction impacts. So a better building stock in the Ontario economy, as well as all the societal benefits that go along with DSM in general --

MS. GIRVAN: Okay, so I just -- yeah, I just wanted to sort of -- I'll take you through. So it includes the Home Community Energy Program, which your target is -- your proposed target is 762 customers.

It includes the low-income, it includes saving by design which represents signing up builders to build homes above code, and it involves the market transformation program about home labelling, which is realtors signing up to do home labelling.

So I just wanted to shake make sure that is the scope of what residential customers were paying for in the context of 2015.

MR. LISTER: That's correct.

MS. GIRVAN: Okay, thank you, so can you now turn to page -- sorry, CCC, T3 number 10, please?

So just on the first page there -- second page, sorry I apologize.

What this says to me is -- I'm trying to get a sense of what you've spent to date of your overall proposed budget and it says, with respect to resource acquisition, it is 3.49 million, with respect to low-income it is 400,000, and with respect to market transformation, it is 780,000 for a total of 4.6 million. Is that correct?

MR. PARIS: Yes. That was correct as of when we answered this. Obviously, they're continuously changing as we spend money for the programs in 2015.

MS. GIRVAN: Okay. So does this tell me that it is possible that you're not going to be spending the whole $23 million -- sorry, $17 million of residential allocation in 2015?

MR. PARIS: I'm sorry. Are you saying is that what it tells you?

MS. GIRVAN: Well, it looks to me we're halfway through the year, and you've spent 4.69 million. So I'm sort of saying, okay, if I look at your overall proposal which is $17 million, does this mean that it's possible anyway that you might not be spending the full amount?

MR. PARIS: I would be surprised if we didn't. A lot of our results are very end-loaded towards the end of the year.

I wouldn't characterize this display as not representative of what we've done in the past when it comes to spending.

MS. GIRVAN: Okay. And I understand that your proposal is if you're given a budget for 2015 and don't spend the amount, it's your proposal under one of your new mechanisms to bring that forward into 2016?

MR. LISTER: I think you're referring to the DSM CEIDA --

MS. GIRVAN: Yes.

MR. LISTER: -- which is a mechanism that the Board introduced in their framework. That's correct, yes.

MS. GIRVAN: All right. If you could now turn to CCC -- sorry, just bear with me a second.

Staff number 9. So it’s T3, Board Staff Number 9. So this is a question about the 4.92 million which you are choosing to spend on -- we can get to this in a second, I think that is on the next page, where there is a list of the various things that you are planning to spend.

If you just scroll down, back again -- sorry, on page 1.

So your proposal is, in addition to what -- I guess this is included in the 37 million, this 4.92. But your proposal is also incremental to this, that if you have an extra 15 percent, you want to spend an additional 4.92 million. Is that your request?

"...while maintaining the ability to spend up to an additional 4.92 million..."

MR. LISTER: Just to clarify, what we've applied for is the 2015 rollover as directed by the Board, in addition to -- or on top of that 15 percent, which the Board invited us to do in the framework, specifically to get moving on the items listed in the table on the next page. But that is exclusive of, or independent of the DSM variance account, which may be up to 15 percent as well.

MS. GIRVAN: Okay, that's clear. Okay, so just stay on this page for a second. And I'm just wondering -- what this does is takes a look at those particular items that are sort of non-program specific items related to your resource acquisition and market transformation.

These initiatives -- and it tell us as of June 2nd what you have spent to date. Has this changed at all, these amounts like in any big way? Or is this fairly representative of where you are today?

MS. OLIVER-GLASFORD: I think, just to clarify, this spending as of June 2nd are items that have actually hit our books.

So if we're talking about projected, it would be slightly different. But as of today, the actual spending is roughly in line with what we're showing here.

MS. GIRVAN: Okay. And let me just --

So would it be possible to move some of these into 2016, given the fact we're in the middle of 2015 now.

{Witness panel confers}

MR. LISTER: Yes. Pending Board approval, that would be our intended or our expected path forward.

For example, Mr. Paris just talked about the Green Button initiative, which is an initiative being led through a working group with a number of other parties.

There's no way for us to exactly predict, as he was indicating, what the costs will be and also when the costs will be.

So it is possible that we won't even get to completing the Green Button initiative before the end of this year, at which point we would look to carry over these monies to help fund that exercise.

MS. GIRVAN: Okay. So some of these may well move into the next year?

MR. LISTER: Correct.

MS. GIRVAN: Okay, but what are you seeking in terms of approval for 2015? I guess you're seeking the full amount?

MR. LISTER: Yes, that's correct. The ability to spend the full amount, and whether or not we needed to roll them forward through the DSM CEIDA, that would be a decision later this year, when we see what we've actually spent.

MS. GIRVAN: Okay. If that happened, would that impact your proposed spending for 2016 and 2017?

MR. LISTER: Necessarily, it would.

MS. GIRVAN: Okay, thanks. Could you turn to tab 5, CCC number 12, please?

I am just curious about -- this is the Home Energy Commissioning Program, and I am just curious if you can help me how the free ridership rate was developed, the 15 percent.

I know it says that -- I think somewhere you said it is what you filed with our input assumptions. But if you can help me as to how you have come to that conclusion that 15 percent is an appropriate free ridership rate for that program.

[Witness panel confers]

MS. SIGURDSON: Hi, Julie, it is Ravi. That 15 percent was negotiated rates through discussions with the TEC.

MS. GIRVAN: Okay. But going forward, I guess my point is, how are you going to ensure that that's an appropriate rate?

MS. SIGURDSON: So we've got a net-to-gross study that is happening moving forward; it is actually was on hold, but it is moving forward now.

But also moving forward with many of our offers through audit or evaluation, we revisit free ridership on a periodic basis. So I could see this offer being captured in that way as well.

MS. GIRVAN: Okay. And if you could turn to -- I guess these are really questions -- if you can turn to Exhibit B, tab 1, schedule 3, page 6, please?

Okay. So I'm looking at the -- there we go, it says: "resource acquisition scorecard", and it says that in 2015, your target for the Home Energy Program is lower 571, middle 762, and upper 952.

And it's my understanding that in 2014, you had 5,200 participants in that program; is that correct?

MR. LISTER: That's correct.

MS. GIRVAN: Okay. And then as of -- I think already you've got 4,000 participants in that program for 2015. Is that correct?

MR. LISTER: Yes.

MS. GIRVAN: I think the reference is T5 CCC number 12?

MR. LISTER: That's correct.

MS. GIRVAN: So I'm just wondering, are you going to revise your target for 2015?

MR. LISTER: No. We don't intend to revise our targets for 2015.

MS. GIRVAN: Okay. But because we're in the middle of 2015, you don't have any intent to update either your targets or your budgets going forward for 2015?

MR. LISTER: No, we don't have that intention, and I would also just point out that while we may be overachieving on residential deep savings, we're significantly underachieving on CCM volumes.

So were we to try and propose different targets, in our view it wouldn't be appropriate to pick only certain targets to re-evaluate.

MS. GIRVAN: Okay. Can you explain why you're under target, in terms of your CCM values for that program?

MR. LISTER: Well, I simply can say that we're not achieving yet, or projecting to achieve, anywhere near the middle CCM value on this scorecard that we're looking at in table 3.

MS. GIRVAN: Okay. Do you have a revised projection?

[Witness panel confers]

MR. LISTER: There was an interrogatory response where we did address that, and I don't have it in front of me, and I don't have the reference.

MS. GIRVAN: Okay, I can probably find it.

MR. LISTER: In that reference I think we projected that we would probably land somewhere nearer the lower band.

MS. GIRVAN: Okay. SEC number 5, that's what I have been told -- a little bird told me that. Maybe we could turn that up.

MR. LISTER: Is that tab -- sorry, which tab?

MS. GIRVAN: Tab 2.

[Witness panel confers]

MS. GIRVAN: Maybe I can have a look at that.

MR. LISTER: Okay.

MS. GIRVAN: That's fine. Okay, those are my questions, thank you.

MR. MILLAR: Thank you, Ms. Girvan.

I think we will look to take our afternoon break. Before we do so, Mr. Aiken, are you on the line?

DR. HIGGIN: Can I just...

MR. MILLAR: Okay. I'm just trying -- is there anyone on the phone who will have questions this afternoon? Or at all?

Mr. -- or Dr. Higgin?

# Questions by Dr. Higgin:

DR. HIGGIN: Yes, Michael and panel and Dennis. As we discussed at the lunch break, EP will submit its questions in writing, the original eight questions with some slight updates. And we will seek written responses for those.

So to keep the record straight, could we have an undertaking for that, for a written response to the EP -- eight questions from EP.

MR. MILLAR: That's okay, Mr. O'Leary?

MR. O'LEARY: Yes.

MR. MILLAR: Yes, so that's JT1.36.

UNDERTAKING NO. JT1.36: TO PROVIDE A WRITTEN RESPONSE TO THE EIGHT QUESTIONS FROM ENERGY PROBE.

MR. MILLAR: Okay, we will take our afternoon break and return at 25 minutes to 4:00.

### --- Recess taken at 3:20 p.m.

### --- On resuming at 3:35 p.m.

MR. MILLAR: Good afternoon, everyone. Welcome back.

Before we continue with the questions, I just wanted to do a quick housekeeping item. I made an error earlier today in marking an undertaking response.

If we can all cast our minds back to early this morning, Ms. Oliver-Glasford volunteered to file a presentation. Unfortunately, we don't have the transcript finished, so I don't have any page numbers yet. But people may recall I marked that as Exhibit KT1.2, when in fact it was an undertaking.

So what I propose to do is just cross out the KT1.2, and we will instead transfer that to the next undertaking, which is JT1.37; does that make sense to everybody?

MR. O'LEARY: I had one or two --

MR. MILLAR: No, it was before the coffee had kicked in, I guess. That takes care of that. Mr. Shepherd has volunteered to go next?

MR. SHEPHERD: Yes.

# Questions by Mr. Shepherd:

MR. SHEPHERD: These questions are, I think, all on SEC interrogatories. The first one is under tab 3, SEC number 6, where we were asking about the 4.92 million incremental budget for 2015.

And you've talked about the fact that you don't know a lot about the projects, it's still very iffy.

I just have one question. Where did you get the 4.92 million number, if you didn't have any real numbers to base it on? Like it isn't a round number, like give us five million and we'll figure it out. It is 4.92, but then you still said we'll figure it out. I don't understand.

MR. LISTER: You're in SEC number 6?

MR. SHEPHERD: Yes, SEC number 6.

MR. LISTER: Right. The 4.92 was a mathematical function derived as 15 percent of our proposed budget. We then fit all of the incremental requirements, as we saw them, within that limit.

MR. SHEPHERD: All right. Basically what you're saying is we don't know what we're going to spend on this -- is this right? -- but we'll keep it within the 15 percent number?

MS. OLIVER-GLASFORD: Correct.

MR. LISTER: I think that is mostly fair. I think what we were saying -- maybe different way to view it is our requirements might actually be more than 4.92 million.

We saw that as a limit to spend on those incremental initiatives.

MR. SHEPHERD: Okay, I got it. Then a couple of pages on, at SEC number 8, still under tab 3, page 2, you have the unit costs for each class for the DSM budgets.

I just want to understand one thing. I'm looking at rates 1 and 6, right. So rate 1 and 6, the unit costs are almost the same in 2015. There's slightly more for rate 1, but it's almost the same.

But by the time you get to 2020, rate 1 is -- I don't know, about 60 percent higher.

I take it that is because you're increasing your emphasis on residential programs, more than you are increasing your emphasis on small commercial industrial programs. Is that fair?

[Witness panel confers]

MS. OLIVER-GLASFORD: Yes. I would say that certainly our residential program is budget-driven because of the expense of the HEC program, relatively speaking, as we projected out targets.

MR. SHEPHERD: What I'm trying to get at is that this is not being driven by changes in expected load over that period of time. It's being driven by budget, right?

MS. OLIVER-GLASFORD: Correct.

MR. SHEPHERD: Okay, thanks. That's everything in binder number 1.

And my next question relates to, under tab 5, SEC number 3, and this is with respect to your collaboration and innovation fund.

And what we -- the key part of this is B, where we asked whether you are going to produce a plan for it each year.

And what you said is you're not necessarily going to, and obviously the concern is that you sort of have this million dollars to spend as you feel like during the year, as opposed to having a specific approach that you are going for.

Can you sort of flesh it out for me a little bit?

MS. OLIVER-GLASFORD: Yes. I can certainly understand the concern, and what I would say is that as we see the LDC's programming evolve, and as we see what's starting to percolate through collaborative discussions and, you know, design, collaborative discussions, that it's becoming more clear what we're going to see coming into a collaboration innovation fund for 2015.

But certainly I couldn't, with any accuracy, project out in 2016 or beyond what might come into that.

But certainly we know that what we don't spend, or what we've proposed that we don't spend here would go back to rates.

So it is kind of a holding account, if you will, as we saw it. We have expectations or hopes that we would be doing significant collaboration to use it, but we don't know for sure and on what particular projects at this point.

MR. SHEPHERD: Yes. What I'm driving towards here is not so much the ratepayers getting the money back, but rather the -- I understand in 2015, you’ve got a very fluid situation.

But as the plan goes further on, you'll have a much clearer picture of what has to be done each year to move your relationships with the LDCs forward, right?

MS. OLIVER-GLASFORD: Possibly, yes. We certainly hope so.

I can't say for certain that we won't see ideas kind of appear in the middle of the year that we weren't expecting. So, you know, I think we do mention here that we will make best efforts to plan for and communicate the collaboration and innovation fund, and we certainly would undertake to do that in consultative sessions and share the ideas and suggestions that we have.

MR. SHEPHERD: What I'm trying to get at is before 2016, for example, will you assign to somebody in your staff the responsibility to have a plan for this money?

MS. OLIVER-GLASFORD: Certainly we will have somebody accountable for keeping track of what the plan entails. So, I guess, yes is the short answer for that.

MR. SHEPHERD: Okay. Next is in the next interrogatory, tab 5, SEC number 7.

So in commercial custom, you're proposing to increase the incentives from a flat ten cents per cubic metre to an escalated amount for deeper savings.

The reason you're doing that is because the deeper savings are harder to get, right? So you’re incenting them more, so you will get people to do them. Is that right?

MR. LISTER: That is in part correct, yes, that is one of the reasons to have inclining incentives.

MR. SHEPHERD: Okay. But what I don't understand is you’ve said that you don't expect to get any increased market penetration from that.

Why not? If you're paying more money, I mean, isn't that part of the point, to get more penetration?

MR. LISTER: I think where we indicate in the response further down, on page 1 of 2, second sentence of the last paragraph to your question on that point we say:

"Rather, Enbridge sees the need for changed incentive levels to simply remain relevant to customers and competitive alongside electricity CDM incentives, and to drive CCM results going forward."

So another way of saying that is that the targets that we've built include using these higher incentives to drive results -- or said differently, if the incentives were not increased, we could definitely expect much lower CCM.

MR. SHEPHERD: But not so much because the customers wouldn't want to participate in conservation activities, but rather their attention would be directed more towards electricity because that is where the big bucks are?

MR. LISTER: That's correct.

MR. SHEPHERD: Okay, I get it.

On the next page you talk about savings by design commercial, where you have changed both the threshold and the incentive.

Now, there's no metric for that. But presumably you have targets as to how much you want to get out of this program, and those would have increased with these changes, is that right?

MR. LISTER: Can you clarify your question? You're asking about what the targets are for SBD commercial going forward?

MR. SHEPHERD: Yes. I realize they're market transformation programs, but you're still -- you still have a goal.

[Witness panel confers]

MR. LISTER: We're just trying to locate where in the record the specific targets exist. Just give us one minute, if you don't mind.

[Witness panel confers]

MR. LISTER: Exhibit B, tab 1, schedule 4, page 29.

MR. SHEPHERD: So same question: How much of these target levels, the new developments enrolled, been affected by your reduced threshold and your increased incentive?

MR. LISTER: So the target we're proposing for 2006 is 30, and your question is how much of that is driven by our changed program design elements?

MR. SHEPHERD: Yes.

[Witness panel confers]

MR. SHEPHERD: What I'm trying to get at, Mike, is do we have the same situation as you have with respect to -- where was I?

MR. LISTER: The changed incentives driving some sort of increased market penetration?

MR. SHEPHERD: Yes.

MR. LISTER: The short answer is, I don't know that we've specifically said as a result of changed program design elements that will result in increased market participation. Certainly a part of our motivation for changing the program design elements for SBD commercial were around being able to capture as many projects as we could. So lowering the threshold opens the universe, if you will, or widens the universe of potential customers in the new construction world. And so that's really where this target in particular derives from.

Having said that, I would also just point out that the new construction market might be quite different from the retrofit market, which was your previous question.

MR. SHEPHERD: Well, no. I guess what I'm trying to get at is this competition with electricity and whether the -- in savings by design you have a similar problem.

MR. LISTER: I think the short answer would be no. It's not -- that's what I was trying to allude to. It's not the same conditions that affect the new construction market as would affect the gas retrofit market.

Of course, new construction, they are building-in electricity and savings by design looks at total energy usage as part of the program. And the program design elements here are attempting to widen the universe so that we can get to more new construction projects, but it's not exactly the same as the retrofit market.

MR. SHEPHERD: So -- all right. You have a target here of 30, and your actual in 2014 is 23, and you're going to do better than that this year, right? So it seems like if you're increasing your incentive by two-third and you're reducing your threshold, so you triple or quadruple the size of the market you can go after, the 30 seems low. I don't understand.

[Witness panel confers]

MR. LISTER: I just want to...

[Witness panel confers]

MR. LISTER: Two caveats to your question, I suppose. I can't confirm right now that we're going to widely surpass the target for this year. I think we are projecting somewhere in the 20 to 23 range. I don't remember what the target is for 2015.

The second point is that the savings by design commercial, the incentive hasn't changed going forward. It's a bit different, but it is still by and large the same level of incentive. What we've changed is the eligibility criteria from --

MR. SHEPHERD: You increased the incentive from 30 to 50.

MR. LISTER: No. It remains at 30 in the new -- in the 2016 and beyond.

MR. SHEPHERD: That's not what it says.

MR. PARIS: Yes, sorry.

MR. LISTER: We've actually lowered the incentive on SBD commercial.

MR. SHEPHERD: Oh, it's lowered? Oh, I read that wrong, my apologies, okay.

Next is SEC number 12. Still under tab 5. And I am trying to understand how this payout thing would work. And so let me go to page 2 of this response, where you have the cumulative payouts on savings by design that you owe but you haven't paid out yet. Right?

MR. LISTER: That's correct.

MR. SHEPHERD: So you've committed to customers that you will give them $4.7 million as of the end of last year, and that was in your budget, right? Was that money in your budget?

MR. LISTER: No. Well, let me try and describe this as best I can.

Not all of it was in the budget at any given point in time, because of course in years past we exceeded the targets. So of course those customers could never have been contemplated as part of any historical budget.

What we did include in budget in years past was -- Bonnie, if you don't mind scrolling down a little bit -- was amounts that we expected to pay out. Not necessarily the full complement of builders who enrolled.

And of course, the dilemma that we face here is that the program is a multi-year program where builders have three years in which to build -- a little bit more, Bonnie, I think to the next page. I think we show how we budgeted going forward.

So what we've budgeted to pay out is not exactly equal to the commitment we would make were we to hit our target every year, and that is a reflection of the fact that builders, in fact, have three years to build.

MR. SHEPHERD: All right. So, sorry, I don't see where the budgets are. Tell me where the budgets are there. The budgets going forward I see. I'm trying to figure out -- you have, for example, on savings by design residential, the previous page, you have -- you've accumulated $4.7 million that you owe to customers. But some of that was budgeted in those three years, right?

MR. LISTER: Correct, yes.

MR. SHEPHERD: Do you know how much that was?

MR. LISTER: Sitting here off the top of my head, I don't.

MR. SHEPHERD: Can you undertake to provide that for both that and the Savings By Design commercial?

MR. LISTER: Yes, we will do that.

MR. SHEPHERD: Then in each case, in each of those years 2012 to 2014, you didn't spend the whole budget, actually paying it out to customers, right?

MR. LISTER: Correct.

MR. SHEPHERD: So what happened to that money?

MR. LISTER: It was through the clearance of accounts returned to ratepayers.

MR. SHEPHERD: Well, except that you actually used it for other things, right, because you didn't refund money to ratepayers all through those years, did you?

[Witness panel confers]

MR. LISTER: I can't speak to whether or not ratepayers actually got a global adjustment refund or not, but I can say that the amounts not spent as a result of savings by design residential and commercial would have been accounted for as a credit to the global DSM VA in the clearance of accounts.

So in other words, if it was -- I'm sort of making this up. If it was a million dollars, then otherwise the DSM VA would have been a million dollars the other way. So it was accounted for in years past.

MR. SHEPHERD: Well, yeah. I'm not asking whether -- I don't think you just took the money. What I'm trying to figure out is, did it go back to ratepayers, or did you use it for something else? Because the DSM VA has puts and takes, right?

[Witness panel confers]

MR. OTT: Mr. Shepherd, I think one way that we could phrase this accurately would be that to the degree those funds were spent on other items, that spending was in lieu of additional DSM VA spending that would have been applied for due to successful results in those other areas.

MR. SHEPHERD: But you would have to meet the criteria in order to get your 15 percent, or up to 15 percent.

If you didn't meet the criteria, then it would just be a credit back to ratepayers, right?

MR. LISTER: That's correct.

MR. SHEPHERD: All right.

MR. MILLAR: Mr. Shepherd, there was an undertaking --

MR. SHEPHERD: I was going to say, yes.

MR. MILLAR: So that is JT1.38.

UNDERTAKING NO. JT1.38: to take the tables on pages 2 and 3 and just add the budget line for each year

MR. MILLAR: And I lost track of where we were with that. Could you just repeat what the question is?

MR. SHEPHERD: Sure, to take the tables on pages 2 and 3 and just add the budget line for each year.

MR. MILLAR: Okay, thank you.

MR. SHEPHERD: And so if I understand what you're doing with this, the $6.9 million that you owed -- the 4.7 and the 2.2, the 6.9 you're not asking to recover it now, right? You're not saying, okay, please give us an extra %6.9 million to cover these costs, right?

MR. LISTER: That's correct.

MR. SHEPHERD: What you're doing instead -- if I understand this right -- is you're saying, going forward we're not going to forecast on the basis of the obligations we incur. We're going to forecast based on the cash incentive payouts we expect to make each year.

MR. LISTER: I think that is a good characterization, yes.

MR. SHEPHERD: So to the extent this 6.9 million is -- has to be paid out to customers, it's going to be in the future budget. These future budgets already include all of that what you expect to pay?

MR. LISTER: Yes. And it will be complicated by the interaction of the then-current builders that go through the program, and whether or not we continue to over or under-achieve.

So it will be -- I think that's the point of the account, is that there will be a lot of puts and takes, if I can use the phrase, with respect to our multi-year obligation.

So it may, in fact -- the payouts may in fact be related to the 6.9 million. They may be related to new builders that go through and new builds, as time progresses.

But somewhere in there, the 6.9 million will have to be paid out in incentive as our obligation.

MR. SHEPHERD: Well, you're actually not expecting to pay the 6.9 million though, right? You're going to pay some lesser amount.

MR. LISTER: No, the 6.9 million is for builders who have gone through the program to date.

MR. SHEPHERD: Some of them won't qualify to get paid.

MR. LISTER: Assuming some of them don't qualify to get paid, that's correct.

MR. SHEPHERD: Because, I mean, your whole budget for the next three years is only -- I don't know. It's not much more than 6.9.

MR. LISTER: Correct, yes.

MR. SHEPHERD: So if your budget going forward is on a cash basis, in effect --

MR. LISTER: Yes.

MR. SHEPHERD: -- then why do you need the account?

MR. LISTER: The alternative -- and I think we talk about the alternative somewhere in this IR response -- would have been to otherwise simply say, we'll collect up front everything that we would otherwise owe as per our obligation in the program. We could have chosen to present it that way.

But again it comes down to the uncertainty of when builders will actually build, and it creates a real mismatch.

So in effect, what would happen in that condition is we would budget, say, the 6.9 million, plus what we're anticipating to do, for example, in 2016. And it would be complicated by the fact that we might over or under-achieve our 2016 target. Those builders to whom the 6.9 million are owed may or may not build.

So it would be a constant give and take of budget, with respect to the program.

Our view was that a simpler, cleaner way of dealing with this was for everyone -- for the Board to recognize that this is the complication that arises out of having a multi-year incentive and annual budgets in this way.

MR. SHEPHERD: Yes, I'm not disagreeing with the concept. I'm trying to understand how it would work, and make sure it is working effectively.

Let me give you an example; 2016. You have a budget of 2,050,000 for residential and 900 for commercial. So 2,950,000 is what you expect to pay out in 2015, right?

MR. LISTER: Yes, that's correct.

MR. SHEPHERD: Now, this account would only cover the variance to that, right?

MR. LISTER: Correct, yes.

MR. SHEPHERD: So the 6.9 is irrelevant, in the sense that some of that might be included in there, but we're not concerned with that.

MR. LISTER: Yes.

MR. SHEPHERD: We're only concerned with, you have a budget for 2,950,000. If you actually pay out 2.6, then there's 350 that is going to be charged to the account and held because you're going to expect to pay it in the future.

MR. LISTER: Let me play it back. If we under-spent -- so we collect in rates $2.95 million in 2016. If we actually only pay out $2.6 million, then we would return the difference which, in my example, I think was $350,000.

The following year, we've built in 2.75. If we spent three million, we would collect $250.

So the idea is to just keep the company whole and ratepayers whole for the obligations owed to those who go through the program.

MR. SHEPHERD: Okay. And so then if at the end of this period -- you're expecting that this is going to go right to the end of 2020, right?

At the end of 2020, let's say you've got a million dollars sitting in this account that you haven't spent. What happens to that?

[Witness panel confers]

MR. LISTER: Yes. It's a good question, and as a result of this being a multi-year program and us having a target in 2020, there is no condition in which incentive won't be owed past 2020, for the very reason that it is a multi-year program.

So we will have to deal with and account for that post-2020 as necessary, and see where that account is. And if the program continues, perhaps we can continue this methodology. Perhaps it will have -- we don't know what the future of DSM and budgeting will look like then.

Perhaps it's an item we can review at the mid-term review, to see expectations and where we are with the account.

MR. SHEPHERD: Okay. But you're not suggesting that you would be able to use that million dollars for anything else?

MR. LISTER: No.

MR. SHEPHERD: It will either stay in here, or go back to ratepayers?

MR. LISTER: Yes.

MR. SHEPHERD: Okay. Next is SEC 14, and this is about commercial custom. I'm looking at the second of three pages and on that second page, you talk about commercial custom being available for Schools.

But you say at the end: "Each building or account will be treated as an individual participant."

What does that mean? What is the effect of that?

MR. LISTER: Yeah, what's meant by that phrase is -- as I'm sure you more than anyone knows, a school board will be made up of many, many different schools.

So we don't -- our intention is not to limit DSM activity to school boards only. If a particular school wants to undertake DSM activity, then a particular building should and can be able to do that.

MR. SHEPHERD: Sorry, I don't understand. You would only ever deal with the school board, right? They're your customer.

MR. LISTER: Okay, yes.

MR. SHEPHERD: So I can understand you could go to Toronto District School Board, for example, and say -- have an arrangement for programs in ten of their schools.

What affect would it be to say each one of those schools is treated as an individual participant? What does that mean? Does that mean they each have a separate upper limit on what you will give them? How does that work?

[Witness panel confers]

MS. OLIVER-GLASFORD: So my understanding, Jay -- and Ravi, perhaps if I'm speaking out of turn -- but my understanding is that the participant or measure is for the purposes of paying out the incentive. Instead of pooling, for example, five buildings and paying it to the school board under the auspices of those five projects, we would be understanding what each of those particular facilities have for purposes of the incentive payment.

MS. SIGURDSON: I can confirm that's correct, yes.

MR. SHEPHERD: Sorry, I didn't hear that.

MS. SIGURDSON: I'm just confirming that Fiona's statement is correct.

MR. SHEPHERD: Okay. All right. Next is SEC 15, and I'm looking at page 2. And I'm looking down here, and basically your 2016 incentives for these prescriptive and quasi-prescriptive C/I measures are mostly doubled. In some cases they're less than that. There is only a very few of them that stay the same. Of course, two of them are the school board boiler amounts, but I will leave that aside for now. But all of the rest of them are going up -- almost all of the rest of them are going up substantially.

Have you done some sort of analysis to assess how much you needed to increase each of these incentives in order to drive participation? The reason I am asking this is because the fact that they're mostly doubled when they're all very different sort of measures makes me wonder, did you have the same penetration problem with all of them?

[Witness panel confers]

MS. SIGURDSON: Jay, I believe there was an analysis that was done in the program lead for that one. We can go back and take an undertaking for this and get back to you.

MR. SHEPHERD: All I want to know is why each one of these was increased the amount that it was and what the market barrier was that was identified that required you to increase it. Okay?

MR. MILLAR: So that is an undertaking?

MR. SHEPHERD: Yes.

MR. MILLAR: JT1.39.

UNDERTAKING NO. JT1.39: TO EXPLAIN WHY EACH ONE OF THESE FIGURES WAS INCREASED THE AMOUNT THAT IT WAS AND WHAT THE MARKET BARRIER WAS THAT WAS IDENTIFIED THAT REQUIRED INCREASING IT.

MR. SHEPHERD: Next is SEC 18, still under tab 5. And you will agree that savings by design -- or, sorry, that savings by design would be enhanced if you could offer it jointly with an LDC, right? Or with more than one LDC? Is that right?

MR. LISTER: I don't think that is unfair. Certainly electricity is part of the savings by design package, but I think that is a fair statement. If we could jointly deliver it, it might be beneficial.

MR. SHEPHERD: Okay. So we asked in the interrogatory what steps are you going to take or have you taken and are you going to take to create -- make this an integrated electricity gas offering? And I didn't see anything here that says what steps you are going to take. You just said you are going to look for opportunities, but I am trying to figure out, what's your plan?

MS. OLIVER-GLASFORD: So that's a good question. We've had a number of discussions with LDCs, as well as some -- the OPA and now the IESO that took place, I guess, last year or the year before, kind of trying to understand and to convey our interest in driving this program forward in the marketplace.

We understand that, given the CDM framework and how it is set up, it is really -- incents the most cost-effective kilowatt-hour, and as such, we're certainly committed to working with them, but I'm not entirely sure if the interest level that we see on the electric side to pursuing new construction programming.

MR. SHEPHERD: You said with respect to home rating in SEC 20 that you're having resistance from the LDCs and IESO because it doesn't have direct and measurable energy savings. Is this the same thing for savings by design? Same problem?

MS. OLIVER-GLASFORD: Not necessarily. That's certainly a component of it. It is just the costs of new construction programs are or have been historically higher in their terms in kilowatt-hour, in our terms, you know, m-cubed or CCM.

And so as such, based on how their framework is set up, it is just a different driver.

MR. SHEPHERD: All right.

MS. OLIVER-GLASFORD: They don't have the scorecard metrics that we have to -- to track other items.

MR. SHEPHERD: They have to deliver kilowatt-hours, and if the program doesn't measure kilowatt-hours it is not as attractive?

MS. OLIVER-GLASFORD: Yeah, but it is not quite about measuring them, it's about doing it at the cost-effective amount. They don't have any other scorecard metrics that create an emphasis or priorities around other marketplace areas.

MR. SHEPHERD: Do they not have the same driver of lost opportunities that you do?

MS. OLIVER-GLASFORD: No, they don't.

MR. SHEPHERD: Ah. Interesting, okay.

Next is under tab 6, SEC number 4. And we were asking about the stakeholder committees and, in particular, the question of confidentiality and whether they should be public.

And you've taken a view that generally speaking these committee proceedings should be public and on the record, and Union in their responses have taken the entirely opposite view and said that generally speaking they should be off the record like an ADR.

Why do you take the view that you take that they should be public and on the record?

MS. SIGURDSON: Our view here is in the interest of being as open and transparent as possible.

MR. SHEPHERD: All right. Okay. My next question is on SEC 26, also in tab 6. I'm looking at page 2. This is your sort of broken-down process and impact evaluation budget.

I'm looking at the line here, "Evaluation Advisory Forum and Consultative", which you have forecasted about 250 a year. Do you know what the TEC has cost you each of the last few years? Or can you just give me a rough idea?

MS. SIGURDSON: Yes, the TEC costs would be around $60,000.

MR. SHEPHERD: 60?

MS. SIGURDSON: Six-zero, yes.

MR. SHEPHERD: Okay. And then the consultative on top of that, how much is that? Do you know?

MS. SIGURDSON: I know we've budgeted around 100. I would have to -- I could take an undertaking to get you a specific number.

MR. SHEPHERD: But...

[Witness panel confers]

MS. SIGURDSON: I know we have an interrogatory from BOMA, and we've talked about stakeholder costs. Let me see if we can pull that one up for a moment.

MR. SHEPHERD: Okay. I didn't see this breakdown there. Is it there?

MS. FRASER: It is just total. Union's is broken down.

MR. SHEPHERD: Yeah, I'm trying to get just the -- just the TEC plus consultative.

MS. SIGURDSON: So I would say it is about 50 to 200. So 200 for consultative, 50 for a TEC, for if you were looking for a breakdown between the two.

MR. SHEPHERD: Sorry. You said 200 for consultative?

MS. SIGURDSON: Right.

MR. SHEPHERD: Per year?

MS. SIGURDSON: So if it's 250, then you take about 200,000 for other, other than TEC, stripping out TEC, which is around 60, so 190, whichever way you want to look at it in terms of a general breakdown.

MR. SHEPHERD: Okay. So I don't understand how the consultative can be $200,000.

MS. SIGURDSON: Right. And then moving on to 2016 and beyond, though, so we've built in --

MR. SHEPHERD: No, no, I am asking for before 2016. You have it broken down already for 2016 and beyond.

Prior years, TEC plus consultative. I would have thought it was more like 150 or less. Can you undertake to provide those?

MS. SIGURDSON: I can, yes.

MR. SHEPHERD: Okay, thanks.

MR. MILLAR: JT1.39.

UNDERTAKING NO. JT1.40: TO PROVIDE FIGURES FOR PRIOR YEARS, TEC PLUS CONSULTATIVE.

MR. MILLAR: Actually, it is 40, I'm sorry, JT1.40.

MS. FRASER: Can I suggest they give them broken down exactly the way Union has in BOMA 17 on Union, which gives DSM consultative, audit committee, or EAC, and then technical committee.

MR. SHEPHERD: Right. That would be great.

MS. FRASER: In totals.

MR. SHEPHERD: My next question is in tab 7, SEC 1. This relates to e-tools. And the e-tools is the method by which you calculate a big chunk of your CCM, right? "A big chunk" being a technical term.

MS. SIGURDSON: Correct.

MR. SHEPHERD: And I don't understand why the Board and the parties can't see how e-tools works, what the assumptions are, what the algorithms are, like that.

Can you explain why that is?

MS. SIGURDSON: We haven't said that the Board and parties that are interested cannot see. Our position that we put into section -- on page 3 of 4 --

MR. SHEPHERD: Yes.

MS. SIGURDSON: -- is talking about the model. The model itself relies on other internal databases, but we have invited, and have in the past invited auditors or other interested parties to come to Enbridge's offices and review the model itself.

MR. SHEPHERD: But you built the model on using your DSM budget, right?

MS. SIGURDSON: Right.

MR. SHEPHERD: So didn't we pay for it? Why can't we see it?

MS. SIGURDSON: You can see it.

MR. SHEPHERD: Well, we asked for the source code, the list of assumptions, and the algorithms, and you said no.

MS. SIGURDSON: The source codes -- we're talking about a model, and I think I’d like to clarify that this is a process modelling tool.

So this is a modelling tool that relies on other internal databases, such as billing and whatnot. So I literally couldn't even understand how to forward on a model. It relies heavily on our other internal pieces.

If you're interested in seeing the model, how it works, the algorithms, we have invited and welcome to invite interested parties to come to Enbridge.

MR. SHEPHERD: Why don't you give us a list and the assumptions and the algorithms??

MS. SIGURDSON: Because they rely on other internal databases. You wouldn't have the total picture.

So you will get into a situation where we’re providing you with one piece of the model. You take it away, and you’ve made other assumptions, and you don't have the other interrelated tie-ins.

And then we would be in a situation where we would try to understand what you've done with the model versus what we've done, and try to explain that. And I think that would be pretty onerous.

MR. SHEPHERD: We didn't ask for a copy of the model.

I understand what you're saying. If you have a model that draws from other things, then it is difficult for us to use it if we don't have those other things.

MS. SIGURDSON: Correct.

MR. SHEPHERD: I wasn't asking to use your model. I was asking rather to see what it is in it, to look under the hood, to see what the source code is so I can see how you're calculating things, and to see what the assumptions are that you built in.

MS. SIGURDSON: Right.

MR. SHEPHERD: Some of them may be from other places, but at least we know what they are.

And to see what the formulae are that you use to calculate going from assumptions to results; why can’t we see that?

MS. SIGURDSON: With e-tools as well. So in terms of this proceeding, maybe that’s a conversation we need to have.

But e-tools validation is something we're undergoing as well as a third party. This was an audit recommendation we had prior. So we are moving forward with hiring a third party to validate e-source, look at the source code, and all of that.

MR. SHEPHERD: I understand that. And I'm not disagreeing that’s a good idea.

MS. SIGURDSON: Right.

MR. SHEPHERD: But that wasn't the question I asked. The question I asked was why can't we see it. If this is what you're calculating your results on, why can't we see how you're doing it?

[Witness panel confers]

MS. SIGURDSON: So in looking at the source code -- so before providing this response, we would take a look to see what it would take, what would it entail, just to understand the request fully.

In doing that, you're looking at source codes with reams -- hundreds and hundreds of pages of literal source code. So say if we provided you with the source code; what would you be doing with it at that point?

This is just literally algorithms and code of what is behind e-tools --

MR. SHEPHERD: Yes.

MS. SIGURDSON: -- which, without an explanation or run-through, I am not sure if it would provide the value you need at this point.

MR. SHEPHERD: If you use an algorithm to go from an assumption to a result --

MS. SIGURDSON: Mm-hmm.

MR. SHEPHERD: -- then, unless we're really stupid, we can figure out how it works. An algorithm is simply a formula.

MS. SIGURDSON: Jay, if you are interested, we can make our best efforts in providing you the materials of the algorithms, and you can see -- maybe that will illustrate my point more clearly for you. We can undertake to do that.

MR. SHEPHERD: Okay. So if we can get -- forget the source code for now. Maybe we will need it later, but just the list of assumptions that you use -- and if some of them are called internally from other sources, then just say so -- and the algorithms that are built in, the formulae that are built into the software. Can you do that?

MS. SIGURDSON: So I'm clear, are you looking for the commercial -- because when we talked about this in the past audit, we were looking at the commercial boiler module.

MR. SHEPHERD: No, I'm looking for the whole e-tools.

MS. SIGURDSON: All of the different modules?

MR. SHEPHERD: Yes. You're calculating 325 million cubic metres of savings.

MS. SIGURDSON: Mm-hmm.

MR. SHEPHERD: So, yes, we want to know where it is coming from.

MR. MILLAR: JT1.41.

UNDERTAKING NO. JT1.41: ENBRIDGE TO MAKE BEST EFFORTS TO PROVIDE THE E-TOOL USED TO CALCULATE THE 325 MILLION CUBIC METRES OF SAVINGS

MR. O'LEARY: Just so we're clear, we're going to make best efforts. But if, as Ms. Sigurdson has indicated, we're talking about producing hundreds of pages indecipherable source code, I do believe that it goes beyond anything that would be of help to the Board in this case.

So, you know, we'll try and come up with some examples, perhaps. But our invitation to go and see the model operate at Enbridge still stands.

MR. SHEPHERD: What I would like to suggest is -- the undertaking that I've asked for is to provide us with a list of all of the assumptions and a list of all of the algorithms, which is not all of the source code.

Assumptions and algorithms; it is a list. There’s only so many measures, so there will be only so many assumptions and algorithms.

However, if it turns out it is too complex to produce, then why don't we talk off line and figure out what makes sense?

MR. O'LEARY: Because I also have concerns about confidentiality, and if there is any information that is specific to some of Enbridge's customers, then we've got to comply with GDAR and those sort of things.

MR. SHEPHERD: Absolutely understood.

The previous concern was that it was proprietary and that is what I'm trying -- the hurdle I'm trying to get over here today.

If we're past the proprietary question and we're into the -- you know, personal customer information issue, we're on the same page on that already.

MR. O'LEARY: I don't know if we can agree we're always on the same page, but we will see what we can do.

MR. SHEPHERD: Thank you. I just have a couple of more, Mike -- no, I lied. That was my last one.

MR. MILLAR: Thank you very much, Mr. Shepherd. Mr. Brett?

# Questions by Mr. Brett:

MR. BRETT: Good afternoon, panel. I want to just start by picking up something that Mr. Shepherd was asking you about.

If you would turn to 1, T2, BOMA 15, this has to do with customers that have many buildings, either school boards or people that have portfolios of commercial buildings, banks; it could be even governments, I guess.

I am still not sure. I want to just get -- make sure I understand your final answer on that.

Are you saying that -- let me just preface this by saying -- take the case of a school board. You will be dealing not with the individual school; you will be dealing with the board, correct, when you're negotiating this deal?

I am going to assume that. I'm going to assume that for the start of my question.

So you're not going to go and start talking to school principals. In fact, you are going to go and talk to the head of the school board, or the person that is in charge of energy management for the school board. Have I got that right?

MR. LISTER: Actually, no. It's the opposite.

What we're saying is that we would not like to have to limit it to only talking to school boards.

MR. BRETT: Sorry, we will come to that in a minute. Just focus on schools, the school sector first.

Are you going to talk about other commercial sectors and the like?

Or are you saying to me, we don't want to just talk to the person in the school board who is responsible for energy management. We want to go and talk to each of the people in the 150 schools that look after caretaking in those schools.

Surely, that is not what you're talking about? Because if you are, we've got -- there is a real issue with that.

[Witness panel confers]

MR. BRETT: It is just a common sense issue. In other words, the entity that does the retrofit, that decides whether or not to enter into a program with you, is not school no. 124.

MR. LISTER: That's correct.

MR. BRETT: It is the Board.

MR. LISTER: That's correct.

MR. BRETT: It is the administration of the school board?

MR. LISTER: That's correct.

MR. BRETT: Okay, so we have that clear.

Now, the second point is why, in terms of asking what does this say about each individual properties assessed on its own merits. And Ms. Oliver-Glasford -- sorry, I've got your name, only half your name.

MS. OLIVER-GLASFORD: Ms. Oliver-Glasford.

MR. BRETT: I apologize. When you said we're not going to pool -- we're not going to pool results, I took you to be saying that you're going to -- when you assessed the results of your -- well, let's not talk about results first. Let's talk about eligibility, because eligibility is the first important concept, I think, in the way we're looking at this.

Are you saying that you would -- that if you entered into this arrangement with the school board, the management of the school board, to have the school board sign-up for this program, that they would only be able to sign up for the program in respect of schools, individual schools that reached a certain threshold of volume? Is that what you're saying?

MS. OLIVER-GLASFORD: No. Not necessarily --

MR. BRETT: You're saying they could put 100 percent of their schools in the program? Correct?

MS. OLIVER-GLASFORD: I think I just wouldn't mind starting out to clarify. There is a communication difference and a paying out and measuring the results on a particular school basis --

MR. BRETT: I'm talking eligibility now, first of all.

MS. OLIVER-GLASFORD: Yes. So in terms of the communication, we would use those main channels as we saw fit, but we would understand what the savings were for a particular school, for example. But I will pass it along to Mike and Jamie for...

MR. LISTER: Yes. I'm hoping this is helpful, Mr. Brett. I think sort of the bottom line is the offers and incentives can apply to a customer's single facility or multiple facilities. And we're trying not to distinguish eligibility to differentiate between the two. So it's at the customer's discretion whether the offer applies to a single facility or multiple facilities.

MR. BRETT: All right. So you're not saying this is a limitation. To use the example I gave, if you have a program that says that you need to have average annual consumption of 75,000 metres cubed to fit in your program, that 75,000 metres cubed can be applied to the entire board.

In other words, you would look at the board -- you wouldn't look at each individual school and say each individual school has to be 75,000. You would look at the board and say the Board has to have 75,000, which as a practical matter would mean that all of the schools could participate; is that right?

MR. LISTER: Yes, that's correct.

MR. BRETT: Okay. And then when you get to the --

MR. SHEPHERD: Sorry. I apologize, Tom.

MR. BRETT: No, no, go ahead.

MR. SHEPHERD: That wasn't my understanding. My understanding was that, in fact, for example, in savings by design, if a school isn't 50,000 this year, then it doesn't qualify. Period.

MR. BRETT: Well, that's sort of why I'm asking --

MR. SHEPHERD: And similarly with comprehensive energy management, or whatever it is called, there is a limit.

[Witness panel confers]

MR. OTT: I just want to offer a few points of clarification if we can, Mr. Brett, and I see Mr. Shepherd nodding along as well.

In regards to the specific IR which we're looking at, BOMA interrogatory 15, we think that we're hearing a perception that this is a threshold that will allow or disallow a customer's building from participating in the programming. That's not actually the case in this excerpt.

In either instance the customer, whether they were applying for our commercial industrial prescriptive or custom, they would be eligible in either way.

The difference is where their results will fall on our scorecards. So for the purpose of driving increased participation levels and more participation from our smaller commercial and industrial customers, the utility decided to create two distinct buckets for capturing results, and these thresholds that we're looking at here simply reference where those results will fall.

MR. BRETT: This is in your scorecard?

MR. OTT: This is in our resource acquisition scorecard.

MR. BRETT: The significance of that is what? Let me just -- before I say this, ask about the significance, let me just try and make sure I understand this.

So that in other words, if you had, let's say, 125 schools in a school board and you had -- 70 of those schools were under -- were under the threshold, 75,000, and 70 were above it, what you're telling me is that the results -- the savings that are achieved from the 75 smaller schools under the threshold schools would go into one part of the scorecard, whereas the savings from the 75 -- the larger schools would go into another part of the scorecard; is that correct?

MR. OTT: That is correct.

MS. OLIVER-GLASFORD: And that kind of clarifies that point of, we do it by building to pay the incentive, but also for purposes of tracking the results.

MR. BRETT: And is that a -- sorry, you mentioned incentive, and I should have maybe picked that up on the way through. Is your incentive different for the smaller school than the larger school in this example? In other words, does the threshold differentiate?

[Witness panel confers]

MR. LISTER: No. The incentive wouldn't necessarily be different, but of course it would depend on what activity -- what DSM activity the school was undertaking, because of course we have many different offers. Yeah.

MR. BRETT: Right, right, yeah, okay.

Well -- okay. So this is not a -- this is not an exclusionary thing.

Okay. I would like to turn to the -- to BOMA 13, number 60 for a moment. And that is the -- that deals with a subject we haven't talked about much today, actually, which is on-bill financing. And I am using this particular -- well, this is a -- this BOMA 6.T13. If you have it you will see that it deals with on-bill financing. Do you have that? Everybody have that handy?

MR. LISTER: Some of us do. We're getting there.

MR. BRETT: What I would like to start with is the -- I take it from reading the answer here that Enbridge does not at this stage -- maybe I should put this more positively.

Do you have a view on whether on-bill financing is something that you are going to include in your program? I understand from reading this -- and I don't want to talk too much here. I want to have you talk -- that you're looking at on-bill financing and you're involved in certain activities.

Do you have a view at this stage on whether on-bill financing is something that you want to make part of your program?

MR. LISTER: I think it is fair to say at this point that we're interested in promoting DSM. So to the extent that on-bill financing can help achieve that, then our interest is there for sure, and I think the --

MR. BRETT: And do you think that the -- sorry, go ahead.

MR. LISTER: -- response indicates that there is still a lot more work to do, and that a critical concern will be, obviously, the risk profile of the utility.

MR. BRETT: Right. And do you have a view at this stage of whether or not on-bill financing does play a critical or important role in encouraging energy efficiency retrofits? Or is it a -- do you have a view on how much it can contribute? Or you mentioned risk, and I understand that's a separate factor. But what about its role as a contributor?

MR. PARIS: I don't think right now that we could say for certain that we agree that it's -- certainly it is a useful tool, but we can't say with 100 percent certainty that it definitely contributes to DSM results.

We've -- I think we've captured in one of our IRs -- I don't know the one right offhand -- where we've partnered with the City of Toronto with respect to the local improvement charge, which is similar, in a similar vein as an on-bill financing program. And, you know, even by the results that we've obtained through that, I can't say for certain that it's necessarily increased participation with respect to DSM programs.

MR. BRETT: This was a pilot program that you have with the City of Toronto?

MR. PARIS: This is a pilot -- it's a pilot that the City of Toronto is running. So we in essence collaborate with them in the delivery of our retrofit program for residential customers, and so they in turn are offering the LIC the ability to include -- and it's just -- their program is not necessarily just limited to anyone who participates in our program, but certainly they complement each other.

MR. BRETT: Yes. And I -- reading about the LIC programs, is it your view that the LIC programs that are being looked at, and perhaps adopted now by some municipalities, are they -- do they help fill the gap, as it were? Or do they -- are they likely to provide a useful -- I mean assuming you're not involved necessarily at all in them, per se.

This is, as I understand it something the municipality would be, generally speaking, be funding themselves if they were to do LIC programs.

My question is really: Do you see that as a useful initiative, one that would help provide -- would help encourage more energy efficiency?

MR. PARIS: I have to say that my opinion is -- I guess the jury is still on that. It’s only been a year, I think -- just over a year since the Toronto LIC has been in full swing.

So I don't know if we've seen enough results yet for me to say that, yes, absolutely it's a useful tool or, no, it's not.

I can say, you know, from the small sample group that I've seen thus far, that it does help people with respect to wanting to do increased measures, so the more expensive measures.

I don't off-hand know exactly what the participation rate is with the City of Toronto's LIC, but I can tell you that it's nothing that's been out of control.

I don't think they're necessarily struggling to keep -- for people to participate in it.

MR. BRETT: Yes. And is it fair to say you haven't done -- at this stage at least, you haven't done the analysis that Union did.

What I mean by that is Union, in their evidence, submitted a fairly detailed analysis of what they thought the relative contribution of on-bill financing was. And they concluded, as you are probably well aware, that it was more -- the level of the incentive was much more important than on-bill financing.

And it was a reasonably -- you know, it was a reasonably thorough piece of work. Have you done that sort of an analysis at this stage? Or are you still more feeling out different directions?

MR. PARIS: I honestly couldn't say that I've read the Union evidence in that detail.

MR. BRETT: I see. Anybody else familiar with the Union document? No? Okay, let me move on then.

I want to -- I want to get into another area, now which is, I will call it -- and I've got several questions in this area, but I want to talk about evidence-based programming and what that means to you. And there's several IRs that we've asked on this and others have asked.

But the first question is: Can you tell me how many of your programs and which of your 22 programs are programs in which the actual savings that result from the program initiative are measured after the initiative is completed, and the actual savings that are achieved are measured and then are used in some fashion to in connection with your scorecard, or in any other way.

But first of all, how many are they measured?

MS. OLIVER-GLASFORD: Sorry, can you just point us to the IR that you're --

MR. BRETT: Well, I'm asking you in a general fashion at this stage.

There's a number of different IRs that deal with specific situations. But I want to know, as an overview question, how many of your programs have measured savings?

MR. LISTER: Earlier today, we accepted an undertaking to look at each of the 22 programs and comment on which were -- if I can use the term -- CCM-generating.

By the same undertaking, we could provide those programs which are, as you describe, more -- if I can use the term, behavioral in nature. Is that what you're after?

MR. BRETT: Yes. What I'm looking at is a little different. But I would say this, that the mechanism of adding -- the answer I am looking for to the previous undertaking would be fine.

But what I am looking for is not anything to do with -- not behavioral as such, because that's a word I am not sure I understand.

What I would like to get is the -- of those 22 programs, how many of those programs -- in how many of those programs do you actually measure the savings.

Let me give you an example of one where I think you do measure the savings, and this might help out.

I think Run It Right --

MS. SIGURDSON: I think I can actually respond to you.

MR. BRETT: That's one of your programs. Just let me finish this, if I may.

In that case, you do measure the savings, as I understand it. You measure it for one year, I believe. You don't measure it after one year.

So I guess part of my question would be, you know, if you do measure it, for how many years do you measure it? I think you will see where we're going here.

What I -- I'm trying to get a sense of to what extent your -- and I want to do this -- the only way that I can do this that makes sense to me is program by program, because general statements are a little harder for me to deal with.

Run-it-right is one program in which you do measure savings, correct?

MS. SIGURDSON: So the --

MR. BRETT: Are there others besides Run It Right, or is it Run It Right the only one?

MS. SIGURDSON: So to clarify, I would say that all of our programs are measured --

MR. BRETT: No. I’m sorry, could you speak into the mic a little better? I can’t hear you.

MS. SIGURDSON: All of our programs are measured in some shape or form.

MR. BRETT: Well, no. What I'm talking about is -- most of your programs are deemed savings. Sorry, just let me finish my question.

MR. O'LEARY: She is trying to answer it.

MR. BRETT: We're wasting time here.

What I am trying to distinguish are actual measured programs. You will recall I said at the outset that after the initiative was completed, looking at the actual statistics, the numbers.

In most of your programs, as we understand it -- and we have great respect for what you've done, don't misunderstand me. But in most of your programs, you forecast savings. You forecast savings based on engineering estimates, based on any number of other factors.

But you forecast savings in advance, and then you use that -- you forecast savings, and you use that to feed into your scorecard.

Now, I'm just asking -- I'm asking a different question. I'm asking how many -- how many, for example you have other programs like Run It Right where you will, say, give an incentive for a retrofit in, let's say, an industrial program or a commercial program. And then you are able to calculate the savings that result from that retrofit, after the fact.

And you're able then to compare it with what the pre-project consumption was. In other words, you're comparing consumption before and after; that's what I'm getting at.

I know you're doing that in Run It Right. Do you do it in any other programs?

MS. SIGURDSON: I understand what you're getting at, so let me explain my position here.

MR. BRETT: I can't hear you very well.

MS. SIGURDSON: I said I understand what you're getting at, so bear with me for a moment.

So what I was trying to say is that all of our programs measure savings in one way, shape or form or another.

So for example, we have Energy Compass -- and I will get to Run It Right in a moment. We have Energy Compass that is based on benchmarking, which is based on measured data at some point in time.

We have prescriptive programs that are measured, that use input assumptions and those --

MR. BRETT: Let me stop you on prescriptive programs for a moment.

As I understand your prescriptive programs, you have rules of thumb, or you have rules of -- you have engineering assumptions and engineering calculations that you use to effectively deem the savings, or forecast a savings that are going to result if people install -- if customers install particular pieces of equipment, right, like a new boiler, a new heat exchanger, a new control system.

You understand what I'm saying here?

MS. SIGURDSON: I do.

MR. BRETT: You have documents that say, okay, if you do that, you're going to get savings of X.

MS. SIGURDSON: And those --

MR. BRETT: And that's not what I mean by measured savings.

What I am trying to explain to you is by measured saving, I mean comparing the consumption of that customer before you do the retrofit and the consumption after. And you prescriptive programs do not do that, correct?

MS. SIGURDSON: Okay. So you're talking about metered metering itself. So there is a differentiation, I think -- I'm thinking measured savings, and I'm reiterating that all of our projects are related to measured savings some way.

MR. BRET: I’m sorry, I should use metered, I guess.

MS. SIGURDSON: That's the disconnect here. You're talking about actual consumption metered data such as the Run It Right program.

So I just want to clarify when we hear measured data, all of ours, including the prescriptive measures which are based on sub-docs that are vetted through a third party, even though they're not -- yes, they're deemed, but they're still based on jurisdictional best practices. So that aside, when you're talking about metering programs, so to that point, Run It Right acts that way, CEM (sic) and OPower.

MR. BRETT: I'm not sure if we're talking past one another, but I'm -- what my proposition is, from what I -- as I read your evidence, you do not have metered results for your prescriptive programs. If you're saying that that is not true, then I think I have to know that. My understanding is that you -- your prescriptive programs have forecast savings that will result if you take these measures. Is that right?

MS. OLIVER-GLASFORD: I think in the way that you are meaning it, you're correct, the only ones that we actually meter pre- and post- necessarily are Run It Right, CEM, and OPower.

However --

MR. BRETT: What was the second one, sorry?

MS. OLIVER-GLASFORD: Comprehensive Energy Management.

MR. BRETT: Yeah, that's -- that was, I thought would be the second one.

MS. OLIVER-GLASFORD: However, there are often times where we use metered data to create a year and to create an input for a custom project, for example.

So there's, you know, there's more -- so it's a bit of a grey area, I would say.

MS. SIGURDSON: And our third-party custom project savings verification uses metered data to establish and verify results as well.

MR. BRETT: Well, that is a different -- yes, all right. That is another chapter. But I am talking about -- what I think I heard you say there is you may have some people -- are you telling me there that, quite apart from what we have been discussing as to what you yourselves meter, that when you come along to verification and audit, the verifier may -- well, you must have the meter in place for this to work, but you're saying the verifier could separately meter certain -- could meter consumption and compare it with what happened before and compare that against the savings that are prescribed, the savings that are forecast? Is that what you're saying?

MS. SIGURDSON: They could compare the results with the estimated forecast, yes.

MR. BRETT: Compare it with the estimated savings.

MS. SIGURDSON: Correct.

MR. BRETT: Yeah. But you -- now, is that -- do you have -- have you got that kind of data where you've done that on these various prescribed programs that you have?

In other words, you have a list of prescribed -- I think it is in BOMA 33. You have a list of a whole lot of different -- you probably don't have to turn it up, but you have a whole lot of -- you have a list of the savings that you project from installing individual pieces of equipment, and you have a couple of pages' worth of different pieces of equipment, everything from a boiler to a control to a...

Are you -- now, are you -- one of our questions is -- one of our interests is, well, that's what you say or you forecast based on your engineering analysis.

What are the actual results in those cases? Now, if you're telling me you have either for the custom -- well, let me step back half a step here.

Are you saying to me that for the custom programs you have -- you measure the savings for every one of them?

[Witness panel confers]

MS. OLIVER-GLASFORD: So I think, you know, in terms of prescriptive, generically we would not do metering of a particular project post a prescriptive measure going in.

MR. BRETT: For verification, you mean?

MS. OLIVER-GLASFORD: For verification; that's correct.

MR. BRETT: Right, okay.

MS. OLIVER-GLASFORD: But just to be clear, you know, those assumptions and the forecasting, as you mentioned, it really is based on a technology being tested and metered, and so it is not based on just kind of a dartboard approach, as I've heard before, or some --

MR. BRETT: No, I hear you.

MS. OLIVER-GLASFORD: -- so just to put some --

MR. BRETT: You're saying they're not just picked out of the air. There's --

MS. OLIVER-GLASFORD: Right, correct.

MR. BRETT: There's engineering analysis behind those, and --

MS. OLIVER-GLASFORD: Right.

MR. BRETT: -- that presumably is -- or they could be based, I suppose, on vendors' specifications or vendors' representations and warranties, could they? In some cases? Equipment vendors' specifications and warranties?

MS. SIGURDSON: All of the different inputs are considered as we update the sub-docs on an annual basis.

MR. BRETT: So you're telling me it could be a combination of things.

MS. SIGURDSON: That's correct.

MR. BRETT: Okay.

MS. OLIVER-GLASFORD: Just to be clear. We've heard from our customers and I heard it myself in some of the electric consultation periods, is that they like the simplicity of our programs and to kind of create more extra touch points is cumbersome.

MR. BRETT: Just on that, if I may. I apologize. I just -- if you look at -- could you turn up BOMA 33? This is an example, perhaps a small example, of what we're talking about, but it is --

MR. OTT: Mr. Brett, could you provide us the tab, please.

MR. BRETT: Sorry?

MR. OTT: Could you provide us the tab, please, at BOMA --

MR. BRETT: Sorry. It is 13.

MR. OTT: Thank you very much.

MR. BRETT: It is page 2 of 8. Do you have that all right?

MS. OLIVER-GLASFORD: Yes.

MR. BRETT: Okay. I'm looking at the table there, items -- the third, fourth, and fifth items -- or, sorry, numbers, items number 3 and 4, boiler hydronic condensing, boiler hydronic high-efficiency.

There are no numbers there for the boiler, number of boilers, but there are numbers in the last column which are the cumulative cubic metres.

Could you provide the numbers for the boilers there?

MS. OLIVER-GLASFORD: If I am reading that correctly, I think those are the results. Am I looking at the right spot? So you're looking at page 2 of 8?

MR. BRETT: Sorry, there is two columns there, units -- the first one is called units and the second one is cumulative cubic metres, right? I am on page 2 of BOMA 33.

MS. OLIVER-GLASFORD: I believe these are based on results from 2009. So perhaps there are no -- but maybe we should double-check that. So we will take that away and just check on that.

MR. BRETT: Can you get that for us, what those numbers would be? I guess we have an undertaking.

MR. MILLAR: JT1.42.

UNDERTAKING NO. JT1.42: TO PROVIDE THE NUMBERS FOR THE BOILERS AND FILL IN ANY BLANKS THERE ARE UNDER THE UNITS COLUMN.

MR. BRETT: Yeah, and perhaps if you don't mind, when you're doing that you could just check and see in the other years -- I take your point. You have these numbers for each of the years from 2009 through. Could you just check and also fill-in any other blanks there are under the units column? There are a couple of others. Not many. Most of them are there.

MS. OLIVER-GLASFORD: We will make best efforts to do that, yes.

MR. BRETT: All right. Okay. Now -- so in terms of the numbers, these would be -- I'm asking for -- if you look at your Run It Right, and your other one was the custom program, those were the two programs where you measured results, and the way I am using the word "measuring", measuring metered results.

Would you be able to give us the percentage of your total budget that is spent on those two programs? You have given us -- well, can you give us -- I guess there would be two things. Number one, the percentage of your total budget that goes to Run It Right and the custom program for larger customers, and the second would be the amount of cumulative savings that those two programs comprise.

Could you do that? You can do it by way of undertaking if you like. I don't expect you will have it perhaps top of mind, but...

[Witness panel confers]

MS. OLIVER-GLASFORD: Sorry, we're just conferring, but I just want to make a clarification for the record, and perhaps we weren't clear enough. I should probably not have used CEM, but CEM stands for Comprehensive Energy Management, so I just --

MR. BRETT: Okay, fair enough. With that qualification, can you give us that information?

MR. LISTER: I think we can provide the undertaking. I do know that that the material is in the body of the interrogatories.

MS. OLIVER-GLASFORD: Yes.

MR. LISTER: But it might be a little bit more efficient if we just accept the undertaking.

MR. BRETT: It is in a different interrogatory response?

MR. LISTER: The information that you seek might be in a couple of different spots, so it is probably --

MR. BRETT: If you could refer us to the different spots --

MR. LISTER: Sure. It is probably just more efficient if we just accept the undertaking and --

MR. MILLAR: It is in Staff 2, is what I understand.

MS. BENNETT: Some of those answers, yes.

MR. BRETT: That is probably a better way to do it.

MR. MILLAR: I think it is Staff interrogatory 2, so that should assist you.

MR. BRETT: You're saying that is in there, we don't need an undertaking for it?

MS. BENNETT: It has the percentage of CCM.

MS. OLIVER-GLASFORD: So I've got Board Staff 2 up in front of me, so thank you very much for that.

It does ask: "Please provide the amount of percentage of cumulative natural gas metered billing data as opposed to modelled or prescriptive savings," as (b).

So that's --

MR. BRETT: Is that the same question as I was asking? I'm actually tying it to the two programs if there's --

I mean, I understand -- I think I understand that there's -- there are other areas, there is one other area at least where you -- I don't want to confuse things here. So maybe I should just be quiet about that.

I know you have some benchmarking in one of your behavioral programs, I believe, and I don't want to confuse that with what I'm talking about now.

So I'm interested in, as I said before, the percentage that Run It Right and CEM, which are the programs where you actually meter measure the savings before and after. What money is spent on those two programs?

MS. OLIVER-GLASFORD: I think Mr. Lister is correct. I think we will just seek to take an undertaking, so we can pull it together in one spot.

MR. MILLAR: JT1.43.

UNDERTAKING NO. JT1.43: ENBRIDGE TO PROVIDCE THE MONEY SPENT ON Run It Right and CEM

MR. BRETT: Okay. Now, that is sort of the basic -- sort of a platform.

Now, I want to refer you to two different IR -- two different BOMA IRs to discuss briefly, and the first one is T2, BOMA 58.

So in this case, do you have that all right? Yes.

We asked you about what metrics is Enbridge using for performance-based conservation, and has Enbridge considered developing scorecard metrics based on addressing the lowest quartile of heating load customers and moving them up to the top quartile over a five-year period.

So that is sort of an energy intensity criteria. But, you know, don't let that confuse you or I. It is as we discussed it in the question.

And the answer that you gave, and this is what's of interest to us. I have a couple of follow-ons on the answer.

You say at the bottom of page 1:

"Enbridge has not proposed the use of a scorecard metric which measures its ability to improve the efficiency of its ‘lowest’ performing customers on a m3 FT squared basis to be comparable to the efficiency of its highest performing customers by that same measure. The company has declined to pursue this approach for the following reasons..."

And I just want to ask a couple of questions about the Reasons, and the first is that you don't have m3 F2 information for all of your customers.

Well, in this particular situation, I'm talking -- we're talking really about the customers that would qualify for your custom program, and not your residential.

And so the question then is: You're saying you don't -- you say either you don't have it or, I think you say elsewhere it is difficult to get. But do you not -- are you not able to get that information as part of your Run-it-Right program?

Are you not able to get the square footage of the buildings that your customers have, or for the CEM program?

[Witness panel confers]

MR. LISTER: Just to clarify, you mentioned in your question that this related to custom. I think what you meant earlier in the interrogatory -- this is related to performance-based conservation, so I will just draw that distinction.

And I think in the answer what we're trying to reflect is that -- I guess maybe the question wasn't very precise.

The question was really, have you considered, you know, targeting the program so that you move customers from one targeted area to another targeted area.

Our response indicated, you know, we didn't limit it to Run-it-Right only. We were saying in the universe of our two million customers, we don't have square metre -- or we don't have m-cubed per square foot information for all of those customers.

We may be able to attain information related to a specific program like Run-it-Right. That wasn't the question, but again it takes us back to -- that's just one of many points why we didn't think that that sort of approach is appropriate for that program.

MR. BRETT: Well, then I agree with you. I take your point on the question. But I just want to go through these other points here, because these are of considerable interest to us.

MR. LISTER: Okay.

MR. BRETT: The second point that you have -- let's assume that you are, one way or another, able to get the square footage. Just make that assumption with me for a moment.

You talk about the fact that you would only have six, you bimonthly meter.

Now, if we were talking about -- again, my mistake on the question. But if we were talking about the larger customers, the customers that you have with Run-it-Right or with CEM, are you also bimonthly metering those? Or are those mostly monthly meter, just as an aside?

MR. LISTER: No. Those programs would have more discrete measurement of consumption data.

MR. BRETT: Okay. So they would be more intensely metered, effectively.

So in a sense you've -- okay. Now the third thing is:

"analysis of efficiency at a single meter point is highly challenging, raising questions regarding what changes within a building the utility should adjust for, e.g. changes in occupancy, building use, et cetera."

Now, could you explain that a bit to me? In your experience with Run-it-Right and CEM, do you have -- do you not have mechanisms for adjusting over time, if there are changes in use or -- I mean we're talking about material changes in use, or occupancy, or equipment.

I mean, I had a assumed, perhaps wrongly, that these adjustments would be built in to some degree, they would be built into those programs. In fact, part of the program would consist of -- could consist of upgrading certain pieces of equipment, for example.

MS. SIGURDSON: Is it on? To be helpful here, I would like to talk about our experience with Run-it-Right for 2013.

So with Run-it-Right, our experience has shown us that it is difficult to -- you've got to measure actual data, and then to understand what those changes are and how to address those changes in those savings, is still a challenge. And our auditor, in 2013, realized that and said okay you need to -- we tried to establish a methodology.

So I think even that auditor had said they hadn't seen another jurisdiction running a program such as this in this method.

So it is cutting edge. We realize that, it is interesting, but we want to learn more as we go forward.

So that auditor had suggested doing a survey. So in 2014, we did conduct that survey. We still do have challenges in catching or getting that information from customers.

We are making enhancements to the offer, to now get that information at the onset of the program so that we can learn further.

MR. BRETT: The information being the square footage?

MS. SIGURDSON: Whatever information we need to -- or building changes, occupancy, usage; all of that plays into the actual results --

MR. BRETT: Yeah, so have you made these changes now already?

MS. SIGURDSON: We're going to start making those changes now, exactly.

MR. BRETT: You have made them or you're making them?

MS. SIGURDSON: Moving forward, for the next -- so right now this has come through our 2014 audit, so that --

MR. BRETT: Yeah, okay. I see. So this was a result -- so you had an audit, and the auditor made certain observations. And is that audit report -- or can we see that report? Can we see that part of the report?

MS. SIGURDSON: For the 2013 by way of undertaking we can provide you the audit recommendations --

MR. BRETT: Yeah.

MS. SIGURDSON: -- that I am alluding to here in terms of their recommendation to provide a --

MR. BRETT: So that is on your website or something like that.

MS. SIGURDSON: That would have been filed with the Board, yes.

MR. BRETT: Yes, okay.

MS. OLIVER-GLASFORD: So said another way, I mean, I think when we do our modelled and engineered estimates we're building up based on estimates. And what Ravi and the audit is finding is that you still need to break down based on some assumptions or some understandings.

MR. BRETT: So it is somewhat broader than just the -- is it the issue of -- it is the issue of forecast versus actual, the things that could happen to make actual different -- is that what it is, or in part --

MS. SIGURDSON: Yes. And an explanation of those actuals. So what we're finding is --

MR. BRETT: Yeah.

MS. SIGURDSON: -- you know, so the savings may -- you would think intuitively we have moved forward this program, educated the customer; therefore, they should yield savings --

MR. BRETT: Yeah.

MS. SIGURDSON: -- but then you're finding that the savings are actually going the opposite direction, but it might have been for an external circumstance.

MR. BRETT: I understand. I mean, part of where this is coming from is that over the years, the last 20 years or so, as I think you all know, there's -- the energy services industry has done retrofit projects where they actually recovered the cost of the project from the savings generated, right? And those projects often have a seven-, eight-, nine-, ten- 11-year term on them, those contracts.

So there are formula that were developed, painstakingly developed, to record and monitor any changes in factors that would affect the consumption that were -- over that period of time. So there is a body of knowledge out there, but it sounds to me like you're actually making these changes going forward --

MS. SIGURDSON: That's right. We're working hard to --

MR. BRETT: -- that would allow you to do this. In other words, what I'm trying to -- as you probably are well aware, the intent of my question really is to get at the fact that there are ways that you can make adjustments for changes in conditions.

And the fact that you might have changed conditions is not a lasting reason for not measuring results or for not assessing the value of a program on a metered measured basis. That's the question I am really leaving with you, and --

MS. OLIVER-GLASFORD: Yes. I think -- you know, I don't -- I think that is an accurate statement. I think it is understanding what that entails, what those savings -- you know, what those changes are, how do we understand what they are, how do we make sure we get accurate information to make the assumptions to back them out of things.

And I think that is where -- it's not quite as simple as it might seem, because it's not like you get the metered data; therefore, you have got your answer. You still have to make some assumptions, understand some realities, and I think that is just the only thing we're trying to point out.

So certainly it is something that we're interested in doing and learning from, and that's kind of the journey we're on.

MR. BRETT: So I could put it that it would be fair to say that you're -- I don't want to -- I don't want to overstate this. But you're making some movement in that direction? You're trying to get yourself in a position where you could use that technique?

MS. OLIVER-GLASFORD: We're certainly trying to understand it better and understand the infrastructure implications that might be required if we go that route on a broader basis.

MS. SIGURDSON: In doing so we're trying to work towards establishing a clear and acceptable methodology.

MR. BRETT: I'm sorry, could you just repeat that?

MS. SIGURDSON: I said in doing that we're trying to move forward in establishing a clear and acceptable methodology to measure those savings.

MR. BRETT: Okay. We're getting on here. How am I doing time-wise?

MR. MILLAR: You are about 50 minutes.

MR. BRETT: Okay. Are you trying to -- you want me to finish up here, or --

[Laughter]

MR. MILLAR: Sort of.

[Laughter]

MR. BRETT: You're going to kill me, right?

MR. MILLAR: No, no. Staff still has some questions to go too, so I just -- if we can be done before sundown.

MR. BRETT: I think if you don't mind, I think we're finished with that topic, which is the main -- I have three other short topics which I think I can handle within a fairly short period of time, and I think I would rather do that in the morning if I could.

MR. MILLAR: I don't think we're planning to have Enbridge back in the morning, so --

MR. BRETT: You're not. Well, then --

MR. MILLAR: No. It is just Staff left after you, and we've only got about 15 minutes --

MR. BRETT: Oh, I see. All right. Well, I'll try and -- all right. I'm sorry, I misunderstood you. Okay. So let's just look at what else we have here. Just give me a minute here.

Just a question. I want to clarify one thing. Did you say that the 2013 audit was in the record of this case?

MS. SIGURDSON: Yes. It's not in this case, but it has been filed with the Board.

MR. BRETT: It has not been?

MS. SIGURDSON: Not included in this case, but it has been filed with the Board.

MR. BRETT: Okay. Now, could we get that? Could you give us an undertaking to file that here in this case so we can read those provisions?

MS. OLIVER-GLASFORD: Just to clarify Ms. Sigurdson's comment. So it is on the public record with the Board, but we would be happy to provide --

MR. BRETT: It's on the public record?

MS. OLIVER-GLASFORD: Correct, but we can provide it to you.

MR. BRETT: All right. That would be good if you could, thank you.

MR. MILLAR: That is JT1.44.

UNDERTAKING NO. JT1.44: TO PROVIDE THE 2013 AUDIT.

MS. OLIVER-GLASFORD: Sorry, just so I'm clear, we're providing you the 2013 audit, like, the final --

MR. BRETT: Right. Right.

MS. SIGURDSON: Are you looking for the excerpts that I am referring to, in terms of the --

MR. BRETT: I think the -- well, if you're going to provide it, you may perhaps just provide the audit report if that is all right.

MR. O'LEARY: Is that 100 pages?

MR. BRETT: How many? Sorry, I missed -- did somebody say it was several hundred pages?

MR. O'LEARY: I don't recall specifically, but it is a lengthy document. We can certainly give you the reference, yes, and even the page, but...

MR. BRETT: Yeah. Or if you gave us the excerpts that deal with this issue. We don't need to see the rest of the document.

MR. O'LEARY: Yes, let's do that.

MR. BRETT: We can always find it. If we're interested in reading the rest of it, you're saying we can find it on the Board website.

Some of these as I look at them have been covered. I want to ask you -- we want to deal briefly with the building-code issues having to do with -- well, first of all, I guess...

BOMA 38, this has to do with the savings by design. Now, this may have been covered-off to some extent.

MR. LISTER: Do you have a tab number, sorry, Mr. Brett?

MS. FRASER: Yes. 5.

MR. BRETT: Tab 5, yes. The first question here is, have you -- we had asked you about, in that IR, about estimated savings per project and then how many new construction projects took place in your service territory, and you gave us an answer of the number of savings by design projects you had done. And you gave us the estimated savings in each case.

Now, then you said you don't track the new commercial construction projects in its service territory, in your service territory. Now, we -- granted this is a fairly broad question, again.

But do you track the large projects that are in your service area? In other words, is your savings by design program or your Design Assistance Program -- sorry, savings by design, do you basically wait for people to come in the door? Or do you go out and solicit business for these projects?

MR. LISTER: The latter. We have a sales force that actively tries to engage customers in the program.

MR. BRETT: Okay. So you take a proactive stance on this?

MR. LISTER: Yes.

MR. BRETT: And do you have a handle on how many projects, how many large projects are under development at any given time in your -- in the planning -- perhaps you could just tell me how you do this.

Do you go out and deal with the known developers and sort of try to keep track of what their portfolio looks like coming forward? Could you give me a bit of a flavour for this?

MR. LISTER: I could try. It is about networks and relationships with developers, knowing those in the industry -- and again, as I say, actively trying to find out where the projects are taking place and then, furthermore, convincing developers and designers to enrol in the program.

To my knowledge, there is no database of existing or planned projects anywhere. It really is a sales effort and, by extension, it is knowing those in the business partner network and the developer community, yes.

MR. BRETT: And do you -- it appears to us, from reading the material -- and just to see if I can give you a specific IR, but maybe I can ask the question precisely enough.

In these design projects where you forecast the savings as we see here in BOMA 38, topic 5, do you actually then, after the fact, calculation the actual impact of the savings by design -- in other words, what the actual consumptions are of those buildings, so that you're able to compare them with your view of what would have happened had you not?

MR. LISTER: The way that the savings by design program works is that customers go through an integrated design process, where they're offered various design alternatives to achieve an objective, and the objective is to achieve some level better than code.

MR. BRETT: Is this like code plus 25 percent?

MR. LISTER: That's correct, that's correct.

MR. BRETT: Right.

MR. LISTER: So they will go through that process and then, as a result of that process select, and elect which measures they would like to incorporate into their building design or their construction project.

And based on that, we'll consider them having enrolled and gone through the IDP.

After that process, and once they construct, the projects have to be verified that they've been built to that standard, that target of 25 percent above code.

And the way that that is done is through a third party verifier, through specific tests such as air blower tests and the like. And the verifier assures that the design elements that brought that project to above code standards have effectively been installed, and been installed in the correct way.

MR. BRETT: Okay.

MR. LISTER: Your question was, if I understood correctly, does a year then pass and perhaps we go back and evaluate? And the short answer is no.

MR. BRETT: Okay. Now, the question I would have then is why would you not do that? I mean, this in a sense is, I guess, another variant of the question we discussed earlier.

But why would you not be interested in knowing, you know, what the actual measured results were of the condominium, or the office building? Is that something that you are looking to do in the future, as you get more information along the lines that we were discussing earlier?

MR. LISTER: I'm happy to start the question, and I invite my colleagues to help out if they could.

Again I think the short answer is no, it's not something we're intending to look at for those programs for a few reasons. We use accredited models that we have great faith in, and that have been approved by various agencies.

And frankly, our view is that doing such an exercise of post-verification, or post-measurement after the fact introduces as many complications as not doing that, as measuring up front.

The reason is, again going back to our earlier conversation, just as many assumptions have to be made about what the base line -- the original base line would have been in terms of occupancy, in terms of just the plethora of variables that could affect how consumption actually took place over a period of time.

So in our view, it is a very large effort for very little benefit, and we don't expect -- we don't anticipate it would provide any more value to the evaluation of projects.

MR. BRETT: Okay. So that really is not very different than the earlier question, though, is it?

MR. LISTER: It is very similar, yes.

MR. BRETT: Therefore, if you're going to try to take steps as you described to enhance your ability to measure the results of Run-it-Right or CEM over a period of years, it would seem logical that you would want to take similar steps with respect to your new construction programs.

What's the difference? Are you saying that the distinctions and the changes in condition are any more draconian in those cases as they are in the other case we talked about?

[Witness panel confers]

MS. SIGURDSON: I think one of the distinctions is that the savings by design is based on model data.

So one of our earlier responses, when we were talking about the CER program, was if you're going to go in after the fact and measure actual results which will work to increase the cost of that offer after the fact, then in order to compare apples-to-apples, you would have to say, what changed in that building. So you've already made those energy efficiency changes.

Then in order to truly measure what the differences were, you would have to strip out that equipment or whatever you did, and then measure before. Because that is the difficulty in taking modelled savings to actual savings, and that is different than the Run-it-Right and savings by design.

MR. BRETT: But in your case of the new development, the new construction, you do have a set of assumptions that had to be met. You prescribed a set of measures that the customer could choose from.

You knew which ones he chose. You had somebody verify that he had used those particular design features. So you have -- and then the verifier goes in and says yes, he did use those.

So you know he has built it the way he is supposed to build it. So you're down to really, again, the things we talked about, which is occupancy -- I mean if the condominium is half full, you know, I understand that would be a factor.

But the guy -- as I understand the way you have described it, the developer can't kind of go off once he's, you know, set his -- agreed on what he is going to do, he can't go off and build something different, right?

MR. LISTER: That's correct. I would just sort of highlight, going back to the genesis of your question, what is different with new construction.

Well the first thing that that is different is new construction has not been built. By definition, it is starting from zero. So you necessarily need a model to start you off with something.

MR. BRETT: Yes.

MR. LISTER: And the appropriate base line, as we've always said, is building code. So we try to do better than building code.

MR. BRETT: Have you done -- okay, fair enough.

MR. LISTER: If I could just finish my response?

MR. BRETT: Yes, sorry.

MR. LISTER: The second difference is that the way savings by design is constructed is not to achieve CCM per se. Again the objective is to achieve an outcome that is better than code, whereas Run-it-Right is a different sort of program altogether.

MS. OLIVER-GLASFORD: And just if I could add on one other consideration that we don't really have a good sense of is that this layers on additional, you know, labour intensive activity as well as a significant cost.

And when we're talking about a model that's been vetted and continues to adapt, it is almost like an iterative process, the value of that additional cost is you know --

MR. BRETT: I think there would be cost. But do you not think, in the longer run, that it would assist the credibility of your efforts and the credibility of DSM in general, and you're looking at, you know, a universe unfolding where you are going to be comparing what you do with how much -- how much infrastructure can be postponed by what you do.

Do you not think that having actual results that are measured would assist you in ultimately making your case going forward that -- and I'm just looking for your view here. I'm not making an argument. I am just curious about your view and making the argument that these are real. These are real. Because at least in the past I've heard many comments from parties that say, oh, well, they forecast that, but we don't really know what the hell happens.

Now, in this case you would know what happens. Do you think that's a factor?

MS. OLIVER-GLASFORD: No. I believe our savings are very credible --

MR. BRETT: Sorry, I can't hear you. If you can --

MS. OLIVER-GLASFORD: I believe our savings are very credible, our programs are credible and have been credible for a number of years --

MR. BRETT: In other words -- yeah, I'm not saying they're not. I just -- I was talking about adding more credibility.

Okay. I think -- there is one other area that I want to just ask a couple of questions on, and then we're done here. Well, sorry, on the building-code question, this question comes up a lot. As you know, the OPA has been fond of arguing about the impacts of the changes in the building code to the consumption of energy. In fact, I think I'm right in saying they have attributed fairly significant enhancements or reductions in energy consumption to building-code renovations over time.

Be that as it may, have you done any analyses of the impact of the changes in code over time on energy consumption in your franchise area?

I mean, you have a change coming up in the future in 2017, but have you done, for example, for the current code, have you done an analysis of the impact of that code on energy consumption relative to what existed prior to the current code? Have you done research yourselves on that question?

[Witness panel confers]

MR. LISTER: No, not to my knowledge. We haven't done any explicit research on the consumption impacts of a change in code. I would say that we -- what we do know is that we expect the code to be 15 percent more stringent than today's current code. But, no, we haven't done explicit research on what that would mean in terms of a change in consumption.

MR. BRETT: With respect to your collaboration with the electrics, this has been -- you've discussed this with some other parties, and I am not going to -- given the time, I am not going to get into this in any detail. But I guess I would ask -- you have made -- and I am looking here at -- well, just perhaps I could summarize this in the interests of time.

I think that you've referred in IR responses to BOMA -- I'm looking at number 12, number 62, number 54 -- you've referred to the competition aspect with electrics. You've referred to the fact that the incentives in some cases are quite a bit higher, and you also have, you know, talked about your initiatives with the electrics and the IESO.

And my question to you is, are you -- are you spending time and analysis -- are you doing research on what the solutions will be to this problem at the moment?

Do you have people that are looking at how this integration of design and implementation is going to work? I mean, as an example, you've got an economic hierarchy of initiatives that presumably cuts across the gas-electric line, and you don't have, at the moment, kind of a single focal point making decisions on who will do what.

I'm not going to bring the coals to Newcastle. You certainly have been considering this in some fashion. But have you considered the sort of packages that will emerge that are gas-electric packages? How much work have you done on this -- like, are you in a position where you can begin to propose solutions to how this is going to work?

MR. LISTER: I think --

MR. BRETT: Granted that you are not the only actor in the...

MR. LISTER: Let me try it this way, and you can tell me if my answer has been responsive or not.

So you're quite correct. Throughout the body of the case we've pointed out a variety of different challenges or competitive -- you know, the competitiveness against electric utilities in a variety of ways, some of which you have just mentioned.

So I think generically what our plan has intended to do is to meet those competitive threats, if I can call them that, head-on.

So for example, one of the key things that we're proposing is higher incentives, and as I talked before with Mr. Shepherd about, that will help to keep us relevant.

Another thing that we've put forward in this case is a different kind of focus on smaller-consuming customers, where previously our scorecards would only reward really large CCM projects.

We're trying to create an actual scorecard measure that will help focus attention on a to date under-served market.

And then of course the point that you were just making, more collaboration with electric utilities to both expand our reach, improve, we hope, cost-effectiveness, and for the benefit of all Ontario ratepayers, be able to accomplish more.

I think those are the key things, the key areas in which we're trying to improve the competitiveness of where we stand today.

Having said that, there will continue to be challenges along the way, like different audit and evaluation processes and the like, but I think that answers your question.

MR. BRETT: Thanks. Those are my questions. Sorry for the extension, but...

MR. MILLAR: Thank you, Mr. Brett.

# Questions by Mr. Millar:

Good afternoon, panel. Michael Millar for Board Staff. I hope to be quite brief so we can wrap up for the day.

Could I ask you to turn to T2.Staff.8. And I have a couple of questions just about how updates to input assumptions will be incorporated over the course of your plan.

Just to frame the question, I guess we have a quote there from the DSM filing guidelines that you can see about using the best available information.

As I understand it -- and in truth, I haven't looked at DSM since your last five-year plan, which was a while ago, so I may be a bit rusty, but as I understand it, input assumptions can be updated in two ways. And the first is at the recommendation of the auditor through the evaluation and audit process. Is that correct? That's one way?

MS. SIGURDSON: Correct.

MR. MILLAR: And the second way is through the auspices, I guess, of the technical evaluation committee, which may prepare various studies, for example, the technical reference manual, net-to-gross studies, things like that? That's the other way they can be updated?

MS. SIGURDSON: Yes.

MR. MILLAR: Okay. So I am right so far. I want to talk to you about timing under those two scenarios.

Let's first look at if there's an update through the evaluation and audit committee and the auditor. So under your proposal, if the auditor reviews, let's say the 2014 programs and results, and recommends a change to a certain input assumption, it doesn't matter which one for the purposes of this example.

When would that change take effect?

MS. SIGURDSON: So in the current process it would be immediate. So if we've got -- it's based on best available information. So our draft evaluation report that is issued approximately April of each year, that would represent best available information.

So the Technical Reference Manual had all the updated input assumptions, and that was built into our CCM and our results and our DSM IDA that was reflected in the draft evaluation report.

MR. MILLAR: Okay. So you said under the current framework. Is that how it would work going forward as well?

MR. OTT: In relation to the mechanism, the target adjustment factor, or as a general comment how we would incorporate input assumption changes?

MR. MILLAR: As a general comment.

MR. OTT: Okay.

MS. SIGURDSON: That would still be the case moving forward.

MR. MILLAR: So if it's a recommendation of -- if it comes from the auditor, it's implemented immediately. Do I have that correct?

MS. SIGURDSON: Yes.

MR. MILLAR: Okay. And I guess the other way there can be updates is through the technical evaluation committee, as we discussed.

Imagine the years 2015, new studies have been prepared and they show that an input assumption should be updated, whatever that might be.

When would that take effect? Would it be in 2015, or would it be in the next year?

MS. SIGURDSON: So it depends on the timing. So in 2015, just to help me out with your example there, so if it's -- if there's an input assumption that's updated today, this is post our audit process.

So typically, we will update -- our draft evaluation report is around April of that time, and that is what's provided over to the auditor. That is what is audited and that is the scope of the audit.

MR. MILLAR: Okay.

MS. BENNETT: Hi, this is Valerie. Just a question for the TAF specifically. How would it be impacted in each of those cases? So when would -- the TAF for which year would be impacted?

MR. OTT: For the purpose of simplicity, it would actually be -- the TAF would be applied in the same manner in both of those examples.

So the way that we've proposed the TAF is as a mechanism that would be calculated and implemented while preparing the draft evaluation report. So to the degree we're taking those assumption changes into account for any DSM results, we would at that time in the first quarter of the year following the program year in question, calculate full CCM achievement for a given metric based on the input assumptions that we have filed these existing targets based upon, and subsequently, calculate CCM results based on these new input assumptions that we now have.

Using those two values in the formula outlined in Board Staff 8, we would come up with a target adjustment factor, a percentage factor that would be applied to the target for a given scorecard. And that's effectively how that mechanism would play out, as far as timing.

MS. BENNETT: Okay. So if there was -- if the auditor makes a recommendation for the 2014 audit on an input assumption, would the 2014 target change, or would the 2015 target change -- or both?

[Witness panel confers]

MR. OTT: So in the event that right now, today, the 2014 auditor made an audit recommendation, that would be on a go-forward basis. So in the event that that was an input assumption change, it would take place in 2015 -- and, Ravi, you can step in if I characterized that incorrectly at all.

MS. SIGURDSON: Just to walk us -- maybe I will help with the timeline here; I think that is what you're getting at here.

If you’ve got your draft evaluation in April of, say, 2016. So this whole year we've moved ahead with certain assumptions and then if that was to change, the year is over, but we will apply that to the draft eval -- at that that point we issue that draft evaluation report.

So it applies to year audit before, if that makes sense. So it would apply to the year prior.

And I think an important piece here is that those targets have been set in accordance to our assumptions. And that's what we're striving to do here is adjust those targets in relation to the achievement.

MR. MILLAR: Could we turn to T5.Staff.15, please? This was a series of questions related to some of your custom program offerings.

In particular, question (b) -- and I will turn you to page 3 of 3. I guess it is in the second-last sentence or so that Enbridge notes that:

"No limits or minimum payback periods were applied to the offer conditions, as they would be perceived as barriers to participating in the custom offers."

Could you discuss for us whether pre-qualification criteria other than payback period were considered as part of custom project eligibility?

And I think what we're getting at is what -- what types of things might you have looked at to screen-out free riders?

[Witness panel confers]

MS. OLIVER-GLASFORD: Sorry, I am just going to -- we're still conferring.

But just to, I guess, add one thought on your question is that -- I'm hearing a question about this payback equate to free rider, and I would just say in determining free rider rates, there are many aspects that go into understanding what a free rider is. So payback would be but one of the considerations.

MR. MILLAR: Yes, understood.

[Witness panel confers]

MR. LISTER: So, Mr. Millar, the question -- specific question was what other considerations besides payback were considered in the design of the eligibility requirements to minimize free ridership?

MR. MILLAR: Yes, I think that's right.

MR. LISTER: There is, I thought, an IR response to that. It might not have been a Staff response.

MR. MILLAR: If we missed it I am happy to have you --

MR. LISTER: I won't be able to recollect it in my head that fast. If it's acceptable, we'd be happy to take an undertaking.

MR. MILLAR: Given the time, why don't we do that?

MR. LISTER: Okay.

MR. MILLAR: That will be JT1.45.

UNDERTAKING NO. JT1.45: ENBRIDGE TO ADVISE WHAT other considerations besides payback were considered in the design of the eligibility requirements to minimize free ridership

MR. MILLAR: Thank you for that. Let's move, if we could, to tab 5, Staff 18. This should be a quick one.

This was a question relaying to Energy Leaders, and I think if you look down at the response to (a) under the first (i), it says: "Enbridge would reach out to encourage them," these are the Energy Leaders, "to explore additional non-traditional or newer technologies through technical and/or financial support."

Really this was just a follow up question. Can you give us some examples of what types of non-traditional or newer technologies you might be referring to here?

MR. LISTER: Probably not sitting here right now, by virtue of the fact they are non-traditional or newer. We could give some thought to what they might be.

Hold on one moment, please.

[Witness panel confers]

MR. LISTER: One example might be, as a result of our conferring, ground source heat pumps. Although they have been around for a while, one could consider them, I suppose, non-traditional, at least to date.

So this could be an effort to try and encourage the customer to apply that type of technology.

MR. MILLAR: In fact, I think there were some questions -- I can't recall from whom, but you did speak about the ground source heat pumps earlier.

So I had a question about that, but I think it was already answered.

But if you turn to staff 19 which is also under tab 5, we were going to ask you why you hadn't explored ground source heat pumps a little bit more. But we also wanted to know about advanced air source heat pumps and why you haven't looked at that a little bit more.

Are you able to give us some more information on that? You will see that is in response to (c).

MR. LISTER: I was just going to point you to (c) and simply submit that we have identified that we're happy to further explore opportunities in this area.

But as yet, the conversation we were having before -- and I will speculate that it is very much the same for the type of technology that you're talking about now, which is that the payback periods for these technologies have, thus far, proved to be -- I will say prohibitive, or at least exclusionary.

So as a result, we haven't included them as a direct measure in our programs to date. But again, as the response indicates, we're happy to continue to explore opportunities in the area.

MS. OLIVER-GLASFORD: And I think the only thing I would add to Mr. Lister's comments is that, you know, in our industrial and commercial portfolios our custom projects are just that. They are custom. And so they can be inclusive of many new technologies that, you know, we have, and the bulk of the projects are particular technologies, boilers and whatnot. But we do have from time to time other technologies that are in play and that are less common.

MR. MILLAR: Okay, thank you. Let's turn to tab 6, Staff 25. There was a question related to the Home Energy Conservation program that some of you will be familiar with.

Could you, please, confirm for me that what's known as a blower door test or the actual natural gas consumption of a house is a mandatory part of the pre- and post-audit for the Home Energy Conservation Program? If you say yes I will move to the next question.

MR. LISTER: Okay.

MS. OLIVER-GLASFORD: Yes, we can confirm that.

MR. MILLAR: Yes? Okay. That was -- your incentive was just to say -- just keep saying yes and we will be done.

Okay. This is the last question, Staff 26, which is under tab 7, I believe. And we asked you in (b) about the free ridership rate you'd applied to the Run-it-Right program, and I think the answer to that was -- is zero percent; is that correct?

MS. SIGURDSON: Correct.

MR. MILLAR: And it says here this was established and accepted by the auditor. I'm just wondering if you have any of the supporting material that came to that zero percent. Do you know anything more about why the number is zero, other than that is the number that was accepted by the auditor?

MS. SIGURDSON: Yes. So the auditor actually looked at a few different jurisdictions and provided that in the auditor report.

So by undertaking we can provide you with the excerpt, if that would be helpful to you.

MR. MILLAR: That would be perfect, and that would be JT1.46.

UNDERTAKING NO. JT1.46: TO PROVIDE THE EXCERPT FROM THE AUDITOR REPORT RE: JURISDICTIONS.

MR. MILLAR: And with that, we're finished. So thank you so much. That doesn't just conclude Staff; that concludes all of the questions for Enbridge, I believe. Thank you to the witnesses, certainly the court reporter and all of the parties.

A housekeeping note: We're starting with Union tomorrow at 9:30, and it will be in the other room. It is not in here. So you can leave your binders -- actually, don't leave your binders here, because this room is going to be used, so you might be able to drop them off next door, but don't leave them here. We're adjourned for now, and we will see you at 9:30 tomorrow morning.

MR. O'LEARY: Thank you.

### --- Whereupon the hearing adjourned at 5:50 p.m.